NATVRALL PHILOSOPHY:

OR

A DESCRIPTION OF THE WORLD, AND OF the ſeverall Creatures therein contained:

Viz.

Of Angels, of Mankinde, of the Heavens, the Starres, the Planets, the foure Elements, with their order, nature and government: As alſo of Minerals, Mettals, Plants, and Precious ſtones; with their colours, formes, and vertues.

By DANIEL WIDDOWES.

The ſecond Edition, corrected and enlarged.

1 King. 4. 33. *He ſpake of Trees, from the Cedar tree that is in Libanon, even to the Iſope that ſpringeth out of the wall: He ſpake alſo of Beaſts, and of Fowles, and of creeping things, and of Fiſhes.*

Theſe little leaves the Worlds huge load ſuſtaine,
And what beſides the great World can containe.

Printed at *London* by *Tho. Cotes*, and are to be ſold by *Beniamine Allen*, in Popes head Alley, over againſt the Horſeſhooe. 1631.

TO THE HONORABLE

Sir *William Parſons* Knight Barronet, his Maieſties Survayour Generall, Com-miſsioner *in the Court of Wards, and one of* his Maieſties moſt Honourable Privie Counſell in *Ireland*, &c.

Honourable Sir:

I Doe preſent to your view a ſmall frame of the world, and of the Creatures therein contained, drawne with the Penſilles of iudicious *Scribon*, and of *D.W.* A worke in nature not unlike to our Survayes in *Ireland*, that repreſent moſt lively, vaſte Countries within a ſmall Map. I offer this to you, having heretofore given to you an account of

those services that I have lately done in the survey of *Ireland*, you being Survayor Generall of that kingdome, wherein I have spent the most part of thirty yeares, in the service of my Prince and Country, *Tam Marte, quam Mercurio*, both by Pike and Pen, with great toyle, much hazard, and many hurts; but little profit. Notwithstanding, your demerits and worth be such, as Gratitude hath chosen your Patronage: and Devotion wisheth all honour, health, and happinesse to you, to my good Lady, and to yours,

At your Honours Command,

I. Wyddowes,

alias

Woodhouse.

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FINIS.

Naturall Philosophy.

Chap. I.
What Philosophie is.

Philosophie is a knowledge of Naturall things. Things (her subject) either are He who alone is; from, by, and for whom all things are: or else such they be as are numbred by time, and measured by place, and subject unto motion. God is a Spirit, infinitely good and great. God is but one divine Essence, consisting of three distinct Persons, the *Father*, the *Son*, and the *holy Ghost*. The actions of God are either, the Creating or Governing of the world. The World consisteth either of things invisible, as of Spirits: or Visible, as the heavens, the elements, and the bodyes composed of elements. The heaven of the blessed, *vide Gen.* 1, 1. is counted the third heaven, the Orbes are the second, the Ayre is counted the first. The third Heaven visible is of all substances most perfect. The invisible Spirits, viz. Angels were created heere. Angell signifieth a messenger, by nature hee is a spirit. Angells appeare sometime in dreames and visions, sometime in bodies apparant, and

What Philosophy is.

What God is.

The actions of God twofold.

What Angels are.

How they appeare.

What their office is.

and sometimes in true and reall bodies: their number is great; their office is to celebrate Gods glory, to watch over the world, to preserve us, to declare and do Gods will, to put good motions into our mindes, to resist ill spirits. The Devils were Angels cast from heaven for sin, into the lower parts of the World, and heere they continue seeking to deface the Image of God in man and all creatures.

Chap. II.

Of motions, qualities, colours, tasting, smelling &c.

THings visible contained in the world, are Substances, or Accidents. Accidents are either generall to all things, as motion, time, and place, for these belong to all: or proper to some things, as Qualities.

Two kinde of movers in the world.

How created things move.

There be two kinde of Movers. 1 God. 2 Things created by him.

Things created move from God, and are of finite power in moving in a prefixed matter, and in time. They be of two kindes, without, or within the thing moved; the one called violent, the other naturall: Motion is an unperfect act, moving to that it was not, from that it was: Five things are in naturall motion, the mover, the thing moved, the terme from which, the terme to which it is moved, and time.

What motion is.

Five things in motion.

Six kinds of motion.

There bee sixe kindes of motion, generation, corruption, increase, decrease, alteration of quality, and change of place.

What qualities are.

Qualities are either manifest, or secret: Manifest are either principall, or such as proceede from them: the

the chiefe of the principall, are heate and colde.

Heate gathereth together things of one kinde, and ſeparateth things of contrary nature; as Gold from Silver or droſſe. Colde joyneth together things, as the froſt in winter. What the quality of heate is.

The weaker qualities are moyſture and drineſſe. Moyſture is hardly contained in his owne bounds. Drineſſe keepeth his owne bounds.

Qualities common from the firſt are either ſeconds or wrought from them.

Second qualities from one or more, are deriued.

From Heate commeth Rarity, and Leuity. For Heate openeth and enlargeth the poores. Lightneſſe & thinneſſe commeth of heate.

Raritas or Thinnes is that which hath hollow parts or ſpongie as a ſponge, clouds &c.

Lightnes proceedeth from heate, drawing eaſily upward. Thicknes and heavines, are of colde. For cold gathereth together, and ſtoppeth bodyes, by which, bodyes become heavie. Heavineſſe & thickneſſe of colde.

Thicknes hath his parts ſhut up together as ſtones.

Heavines, moveth downewards: thus is Mercurie, heavier than gold, and gold than Lead.

Tactile or qualities that may bee touched: comming from moiſture, are ſoftnes: and tenuitie from the Ayre: ſmoothnes and ſlipperines from the water. What proceedeth from moyſture.

From dryneſſe proceede hardnes and roughnes, eaſines in breaking and drought. What from drineſſe.

From the firſt qualities diverſly diſpoſed, ariſe others called ſenſible qualities.

Their Originall is obſcure or more manifeſted.

Qualities of obſcure originall, are ſuch as doe not alwayes plainely & clearely declare the ground whence

The uſe of Colours.

they ariſe. Of this nature are colours: which is the ſplendor of the body, illuſtrated by light, with which all bodies are dyed according to their moyſtnes, decocted more or leſſe apt to receive greater, or ſmaller light. Colour, is either ſimple or mixed.

What a ſimple colour it.

A Simple colour conſiſts of none other, as black and white.

White what it is.

White conſiſteth of much light in a thin body, of an ayery moiſture well concocted.

Blacke what it is.

Blacke, is in a thicke body contayning but ſmall light, of moyſture either aduſt or raw watriſh mixed with the earth: as appeareth in the inner parts of the earth.

Of mixt cullors and whence they proceede. And how compounded.

Mixt colours are from thoſe two, mingled either in a meane or unequall portion, of equall mixture is red. Other are made of this meane, and one of the extreames. Yeallow is of much white and a little red, viz. two parts of white and one of red. Saffron cullour or Orange-tawny, is of greater redneſſe, and of leſſer whiteneſſe.

Purple is of much red, and leſſe blacke. Greene is of much black and leſſe red. This being a cleare moyſture is moſt pleaſant to the eye.

Taſting whence it proceeds: diverſe kinds of it.

Qualities, of a more manifeſt originall are perceived in ſmels and taſtes. Taſte is made from the ſtraining of dryneſſe through moiſture, is either hot or cold, in a high or meaneſt degree. Very hot taſtes are biting, bitter, or ſalt.

Taſtes meanely hot or ſweet: Cold taſts are either thicker or thinner, thicke as ſoure and ſharpe: or thin as tartnes: where alſo we place freſhneſſe.

Smelling whence it proceeds

Smell, is a qualitie comming from a dry earthly heate,

heate, made thin by mixture of vapors. If it be well mingled, it is good: if not, it is ſtincking. When good when bad.

Theſe qualities come from the firſt, there are others that come by Meanes from the firſt, ſuch are, generating fleſh by drineſſe, and binding in, healing and joyning together, but more moderate. Hid qualities are onely knowen by long experience, comming from the forme and eſſence of a thing, which in moſt things maketh it hard to diſcerne. Hid qualities are either inbred or paſſionate. Native or inbred, come from formes taking their originall from heaven, and therefore are governed, moſt according to the poſition of the heavens and ſtars, being of moſt efficacy in their ſubject matter rightly prepared, and at certaine times. Qualities ariſing by meanes what they be. Hid qualities how knowne. They are either native or paſſionate. Native governed by the heavens. How and when of moſt efficacie.

As the Load-ſtone in drawing Iron. The Pionie for falling ſickneſſe, Polypody in the diſeaſes of the liver, &c.

Paſſionate qualities, are effected by an agreeing or diſagreeing concord. Paſſionate how effected

Concord is the naturall agreement of things, whereby a feirce Bull tied to a fig-tree is made gentle. What Concord is.

An Oliſe taken up and replanted by a virgin, bringeth forth aboundance of fruite.

Ocymum a Pulſe, being at the ſowing banned groweth the better: The bleeding of a dead body at the preſence of the killer. Diſcord in naturall things, whereby the horſe-fly is killed with the ſmell of roſes: ſo goats are poyſonous unto plants. What diſcord is.

Chap. III.

Of the Celestiall bodies, as the Heavens, the Firmament, the Starres, with their places, order and government.

Naturall things are simple or compact: Simple are stable or unconstant; stable are the heaven and starres. Heaven is as it were a vaulted body made of water, thinne like a skinne, and moveable.

What heaven is.

The Firmament is the orbe of the moveable heaven: containing the world, which consisteth of Ethereall and elementall parts.

What the firmament is.

The Ethereall part compasseth the Elementall: and is not variable: it containeth 10. spheres, and is in continuall motion being moved from the East, to the West in 24. houres, and maketh the naturall day. A star is a firme essence, in heaven, giving light. One star is brighter than another, and they are of divers motion, either simple, as from west to the east; or divers, as their variable motion, north and south: and they have their operation over inferiour bodies, which they worke by themselves, or by aspect with others; which is either conjunct, or opposite: conjunct, is either in the same or severall places; ☌.☍.□.△. caracters bee of conjunction ☌. Sextile ⚹, Trine △: quadrat □: opposition ☍, aspects. Their Poeticke rising or falling is either true or apparant, the true is Acronicke, which is of such starres as rise and set about the sunne setting: Cosmicke ascend with the ☉ and set with the sun rising. Those starres which rise Cosmically fal Acronically. Apparent rising is called Helical which is of stars getting out of the sun beames, & so if the star get into the ☉ beames at setting: or when any star setteth with

What the Ethereall part of it is.

What a Starre is.

The diverse kinds of them.

Their operation over bodies, & how it is.

Their rising and falling, & how it is.

with the sun. Starrs are either fixed or wandring, fixed are the starres of the firmament, whose motion is not sensible; For in 72. yeares they move scarce a degree: keeping still one like distance. Stars are knowne frō planets, by their twinkling. The stars are far bigger in compasse than the earth, and they are of sixfoold order, first bigger than the earth, 107. fold, second 87. third 72. forth 54. fift 31. sixt 18. times. These stars are more or lesse glistering: the most glistering are disposed into 48. Images and are devided into three parts the zodiack & both sides thereof. The zodiack containeth 12 signes, ♈.♉.♊.♋.♌.♍.♎.♏.♐.♑.♒.♓. of the East are ♈.♌.♐. fiery signes. North ♋.♍.♑. watery, ♊.♎.♒. Ayery of the West: ♉.♍.♑. earthy Southern signes. Fiery and Ayery are Masculine: Wateriſh signes and earthly feminine.

Starrs fixed or wandring.

How knowne from Planets.

How and where contayned in the heavens.

Stars Masculine & Feminine.

Aries the Ram is the first signe of the Zodiacke consisting of 13. starres, representing the image of a Ram, it hath 2. starres in his horne of the 3. bignes and 3. in his taile, and one in the tippe of his right foote of the 4. bignes.

Aries.

Taurus the Bull consisteth of 32. starres, 5. of these in his forehead are called *Hyades*, causing raine, the greatest is called the Bulls eye, being somewhat pale. 7. starres in his shoulder are little and called *Vergilia*, and *Pleiades*, because they shew the time of navigation by their rising in the Spring and setting in the Autum.

Taurus.

Gemini the twins of 18. starres; in each head, is a bright star, called *Castor* and *Pollux*.

Gemini.

Cancer the Crab consisteth of 9. starres somewhat obscure.

Cancer.

Leo the Lyon is a bright signe of 27. starres, one in his

Leo.

heart and one in his tayle, are of the firſt bignes, neare his tayle are 7. ſtarres called *Berenices* haire.

Virgo. *Virgo* the maide with wings of 26. ſtarres, one in her left hand is called *Spica*.

Libra. *Libra* the ballance is expreſſed with 8. ſtarres.

Scorpion. *Scorpion* hath 21. ſtarres, of which but 14. are notable.

Sagitarius. *Sagitarius* the Archer conſiſteth of 31. ſtarres.

Capricornus *Capricornus* the Goat, hath 18. ſtarres, of which 12. are moſt conſpicuous.

Aquarius. *Aquarius* the water-bearer, of 24. ſtarres, like a man pouring water fourth of his pitcher, the ſtarre in the extreame of the water is of the firſt bignes.

totall. 364.

Piſces. *Piſces*, the fiſhes conſiſt of 34. ſtarres.

Of Stars not in the Zodiacke. The other ſtarres that are not in the Zodiack are either northerne or ſoutherne ſtarres.

What the northerne Conſtellations. The Northerne Conſtellations are *Cynoſura*, the little Beare hath 7 Starres. Helice the greater Beare hath 27 ſtarres, of which 12 are more viſible. Draco the Snake 31. Bootes the Heardman 22. betwixt whoſe legs is Arctur. Ariadnes Crowne 8. Hercules 28. Cepheus 11. The Vultur or Lira 10. The Swan 17. Caſſiopeia 13. Perſeus 19. The Carter 13. he beareth upon his left ſhoulder the Goat, Æſculapius 24. The Serpent 18. ſtarres. The Arrow 5. The Eagle 6. The Dolphin 10. Pegaſus 20. The foale 4. Andromeda 23. ſtarres. The Triangle hath 4. ſtarres. The totall 360.

What the ſouthern Conſtellations are. The Southern conſtellations are 25. The Whale hath 22 Starres.

Orion hath 38. Eridanus 34. The Hare 12. The great Dog 18. The Whelpe 2. The ſhip 45. Hydra 5.

The

The Crow 7. The Centaure 37. The Wolfe 19. The Aulter 17. The Crowne 13. The fiſh 12. Starres. The totall 316.

Plannets are Starres in the nearer part of Heaven, and are of diverſe motions, and are therefore called wandring, which motions happen not according to the courſe of other Starres, becauſe in the ſpheeres attributed to the ſeverall plannets, they moving themſelves circularly are ſtayed either in their higheſt or loweſt Abſis, or elſe are made to goe backward. Plannets are ſtayed when at their ſet bounds they ſtay their courſe and turne to ſome other part, and ſo ſeeme to ſtand ſtill. What Plannets are. Why called wandring. When and how they are ſtayed.

Abſis or Aux, the higheſt place of the Plannets, to which being moved, they can aſcend no higher, is called Apogæon, viz. fartheſt from the earth.

Abſis or Aux, the loweſt contrary to the other, and neereſt unto us, is called Perigæon.

Plannets are ſaid to goe backe, when removing themſelves, they goe not forward their courſe, but returne backe the way they came, in ſome part. When and how they goe backe.

The vertues and force of Plannets, are as diverſe as their motions be: ſtronger by the proper habitation of the houſe, or by conjunction: otherwiſe they be weake. The vertues and force of Plannets.

The proper houſe of each Plannet is that ſigne of the Zodiacke, in which firſt at the creation they were placed after the opinion of Aſtronomers. The proper houſe of each Plannets.

Thus farre in generall. Now ſome ſhine with one particular light, other with more. They that have the ſame ſhinning, are moved with equall or unequall courſe. Plannets of uneven courſe have a proper motion to themſelves. ♄.♃.♂. Plannets ſome of one light, ſome more.

Their

Conjunction of Planets, common or ſpeciall.

Their conjunction is common or ſpeciall. Common are of theſe three together, and it is called the greateſt conjunction: this through his ſlow motion foreſheweth wonders, as Aſtrologers ſay, though their grounds are uncertaine, yet wee will ſet downe what they ſay, not all as truths, yet ſome may bee probable.

They preſage things to come

(Eſpecially the ſunne regarding) deſtruction to kingdomes &c. If ſuch conjunction, bee in a fiery ſigne it preſageth great drought. In a watry ſigne it argueth raine, in Aery mighty tempeſtes. In earthy extreame cold. In Maſculine death of men, In feminine death of women. Speciall conjunction is either meane or extreame. Meane of Saturne and Mars betokens warres, contention, ſtrife of Kings and Princes, and to theſe proſperous ſucceſſours, if the dominant be good in conjunction.

And how.

The extreame conjunction of Plannets, is great or leſſe, greater of ♄,♃. betokening new ſects, and other like. If ♃. be all ſtronger, ſhall be for the beſt, if ♄. be ſtronger, then followeth loſſe, tribulation and great diſcord, ſay the Aſtrologers.

A deſcription of Saturne his properties, how he ruleth in the bodies, and over whom.

♄. Saturne is a ſtar of a leaden colour, finiſhing his courſe in thirty yeares, hee is a Plannet maſculine, of cold and dry nature, therefore melancholicke, bad & not fortunate, whoſe proper houſe is in ♑. ♒. governing malancholike perſons, and diſeaſes of that humor, and thoſe of a tough and congealed phlegme as Lepry and Morphew. But if hee governe in his proper houſe in due aſpect and degree, moſt profitable experiments may bee made againſt theſe infirmities. His rule appeareth in conception of men, as in the firſt moneth, and in the eight moneth much more.

where-

Wherefore the child borne in this moneth, through the bad aſpect, and coldnes of Saturne, can ſcarce live long: hee ruleth alſo the lives of men, eſpecially in their end, when old men bee cold and full of fleame, as ſay Aſtrologers.

A deſcription of Iupiter. His properties.

How he ruleth in the body and over whom.

♃ Iupiter is a bright Plannet, which runneth his courſe in 12. yeares, his light is ſo great, that it cauſeth a ſhadow, being neere the earth, of which he is called Phaeton: He is hot and moyſt of nature, good, maſculine, and his houſe is in ♐ and ♓ he ruleth over the ſanguine, yong men and merry ſports, and over diſeaſes ſpringing of bloud not aduſt: and rightly diſpoſed. In his houſe, remedies are beſt applied for cure of ſuch infirmities. Vnder his power is the child in the ſecond, but more in the ninth moneth, and the childe that is borne is long of life.

A deſcription of Mars.

His properties.

How he governs mans body and in whom.

♂ Mars, is the 3 wandring ſtar, in colour red or fiery ſhining, his courſe is 2. yeares, is a maſculine exceeding hot, ſchorching and dry nature, after a ſort malignant and infortunate: His houſe is ♈ and ♏ hee ſheweth his force moſt upon Cholerike perſons, and upon motions of youth, ſtirring to ſedition and warre: if hee be well diſpoſed in his houſe in fit aſpect and degree, there may bee remedies uſed for the Frenſie, agues and other hot ſickneſſes. He governeth the 3. moneth of conception, and from 40. to 50. of mans age.

A deſcription of the ſunne. The office and uſe of it. How and whom it governes.

Now of ſtarrs, that finiſh their courſe in like ſpace of time ☉.☿.♀. in a yeare ſpace ☉. The Sunne is the brighteſt of all wandring ſtarres, appointing ſeaſons, nouriſhing life, being the fountaine of light, of heate and all vitall powers, hee is hot and meanely dry, his

house is ♌. he ruleth hot and dry affections, and therefore in his rule is fit remedy for such.

In mans conception hee ruleth the 4. moneth, and governeth from 22. till 41. yeares of age. ☉ by being neareſt or fartheſt from the earth, maketh Solſticium, which is our Summer and Winter: ſummer is ☉, being in ♋. at the higheſt; winter ſolſtice is ☉, being ♑ fartheſt from us. The motion of ☉, cauſeth like length of day and night. ☉, in ♈ and ♎ the Sun in theſe pointes of heaven is equally moved in the 6. ſignes of our hemiſphere, and alſo in the ſix oppoſit, although the points and times of both Equinoctialls vary and change.

He maketh winter and ſummer.

Length and ſhortneſſe of dayes.

A deſcription of Venus.

♀ Venus is a very white ſtar, ſhe goeth neare ☉, ſometime before him, ſometimes after him; in the mornrng going before him, ſhe is called Lucifer, in the evening, following, ſhe is called Veſperugo and Heſperus. ♀ is could and Ayery, and moyſt, her houſe is in ♉ and ♎. She loveth youth, women, and wives, ruleth cold and moyſt diſeaſes, happening moſt about the genitalls. Therefore ♀ in her houſe in due aſpect is beſt remedy of ſuch, ſhe uſeth her power in the 5. moneth, and diſpoſeth life, from 14, to 20. yeares and two, according to Aſtrologers.

Her properties: how and in whom ſhe ruleth.

A deſcription of Mercury. His nature: how and in whom he ruleth.

☿ Mercury is the leaſt wandring ſtar, ſomwhat white, his nature is changeable, and full of turnings, hee is hote with the hote, cold with the cold, of the nature of him with whom he is joyned, his houſe is ♊ and ♍, & is of force in merchandize, of which hee hath his name, and mathematickes are under his rule, he begins and followes ſtudies, & reports rumors & newes. He guideth the 6 moneth, and from 4. to 14. yeares; if hee joyne with the higher Plannets, he denounceth wet

and

and flouds, which alſo hee doth meeting Venus in a wet houſe, in his proper houſe, windes &c.

☾ The Moone is the loweſt wandring ſtarre, finiſhing her courſe in 27. dayes 7. houres; although this ſtarre have light of he owne, yet doth ſhe borrow her ſhining from the Sunne. But becauſe her eſſence or body, is not alike, but thicker in one place, than another, therfore ſhe is not in all places enlightened alike from the Sunne. That part which is turned from the Sunne, is all of it ſhadowed and darkiſh, but that which looketh upon the ☉. is full of light, and onely ſo much light as ſtandeth towards us, ſeemeth to gaine or loſe light, as it is farther off, or nearer the ſun, where as indeed ever the one halfe is enlightened from the ſunne. A deſcription of the Moone.

The face ſeemeth to bee enlightened, as joyned with ☉, or departing from him.

The ☾ joyned with the ☉ in the 4. firſt dayes is covered with greater light of the ☉ beames, and is called the new Moone, but departing from ☉ ſhe appeareth ſtill more enlightened, and it is either in part or whole.

In part before and after the 8 day, called the encreaſe and the waine of the Moone. In part leſſe or more, the leſſe is when ſhe is horned, or halfe moone about the 4. day, being diſtant from ☉ 2. ſignes: and after 8. in the 26. day, the halfe ☾ is ſeene about the 7. day and after 22. day when ſhe is diſtant 3. ſignes or degrees from ☉. The greater apparition of the Moone in part is, ſhe being neare her roundnes, which is about the 11 day and after the 19. day diſtant from ☉ 4 ſignes. How the Moone increaſeth and decreaſeth.

The full apparition of ☾ is when in a right line ſhe is oppoſed to ☉ at 14 dayes or full Moone. Although ſhe When and how the Moone is in the full.

finish her couse in the foresaid time in the circle of the Zodiacke, yet is allowed to every Moone 29: and a halfe day, because she is to passe forward 2 dayes and 4 howres, before shee can overtake the ☉ which maketh 29 dayes, 12 houres. And in 9 yeares she endeth all her divetsity of conjunctions and aspectes, and anew begineth her former revolution, &c.

In what time she endeth her revolution.

What a Commet is.

A Commet is a wandering star, of divers motions, shining in the region of the Plannets, this appeareth seldome, sometime above, and sometimes below the Plannets. It foretelleth greevous accidents.

Others say that a Commet is a fat substance drawne by the heate of the Sun from the earth, and the heate of the highest region of the Ayre; is set on fire appearing like a starre, and is sometime moved in the ayre.

It foreshewth war, Pestilence, drought, and barrennes of the earth.

The light of some Plannets sometime fayle, especially of ☉ and ☾ The defects happen in the Zodiacke, if these 2. starres bee in the knotts of their circles, or neare to them; which knotts are cuttings, made by the course of the ☉ and ☾, and is called the dragon. The higher is called Dragons head, the lower the Dragons tayle. The Ascendant or higher is where, ☾ departing from the middle Zodiacke, doth come nearest unto us.

The light of some Plannets sometime fayle, especially the sunne and moone faileth sometime, and the reason of them.

The descendant, when the ☾ is removing from us. The Eclipse of those starrs is in whole or part. In whole all being obscured, as in the midst of them.

Of the Eclipse of the Sunne and Moone and the reason of them.

In part it happeneth neare one of the knotts.

The Eclipse of ☉, is by comming of ☾ betweene our eyes and the ☉, in the conjunction of both Plannets.

A great Eclipse of ☉, is when the centure of these starres,

ſtarres, proceed in a direct line to our eye.

The Eclipſe of ☾ is the depriving her of the light of ☉, in the oppoſition, the earth ſhadowing her, comming in a ſtraight line betweene them; her Eclipſe is ſooner ſeene in the Eaſt than in the Weſt.

Chap. IIII.
Of the foure Elements.

What Elements are.

ELements are ſimple eſſences, leſſe durable than the heavens, and are the wombs of mixed things &c.

Some cleare as Ayre and water: three regions of the Ayre.

Of the Elements 2. are cleare, ayre and water. Ayre, which is cold and moyſt, and of theſe there are deſcribed 3. regions, the firſt is hot and dry, this is termed the fiery which cauſeth it to be called an Element Ayre the flame being but inflamed ayre: the midle region colder and darker; the third region, in which we live, is hot and cold, by the more or leſſe reflection of the Sunne beames.

The neceſsity of the Ayre.

Ayre, is ſo needefull to creatures, that none live without it, the thinner the better, and more healthfull.

What water is. The natures and uſes of it.

Water, is an element leſſe thin and cleare, moyſt and moſt cold. Water warmed in channells in the earth cauſeth hot ſprings, this is heated by running by ſome hot mineralls, and helpeth moyſt and cold bodies.

Why the water in the ſea is ſalt. The reaſon of the ebbing and flowing of the ſea.

Water, is greater or leſſe. The greateſt is the Sea, which is ſalt, becauſe that the ſtarres drawe forth the thin ſubſtance leaving the earth behinde. The Ocean ebbeth and floweth after the ☾ motion; and from the new moone to the full, humours increaſe and after decreaſe, and the tides are knowne by the Moone. Particular Seas take their name of ſome country, or of ſome

accident, as the red Sea, &c.

Of Flouds & Fountaines.

Waters are in flouds or fountaines, fountaines are beſt which come out of Mountaines, or Rocks, &c.

Diverſe coulours & taſtes of waters.

Water is of divers colours and taſtes. Milky, Greene, Red, Salt, ſharpe, bitter, and like wine.

What the earth is.

The Earth is a thicke element, cold and dry, and is unmoveable, about which all things move, it is round and all things tend as neare the center as they can.

The compaſſe of it.

It is in compaſſe with the water 21600. miles, and is but as a point to the whole world.

Of concreat & mixt bodies

Concreat and mixt bodyes or natures, are eſſences mixt of parts ſeverally diſpoſed. For from ſundry things of divers formes, one forme may bee formed: and things of one mixture according to the divers affection of their elements are diverſly affected.

As ſome are Ayery, ſome Fiery, and ſome Earthly. But the proportion maketh temperature, which is a proportion of qualities, cleaving together in mixture: it is equall or uneven, and is either ſimple or compound: ſimple is in act or power: compound, as heate with drineſſe, &c.

Of mixed liveleſſe natures, as meteors; & what they be, with their ſeverall kinds, and the reaſon of them.

Mixed natures are either liveleſſe or living. Liveleſſ as Meteors which are a hot ſmoake lifted up by the attractive force of ſtarres, ſome 15. German miles into the ayre and no higher: this ſmoke is a vapour or exhalation. A vapour is a moyſt ſmoke drawne from water, and is eaſily reſolved into water. Exhalation is a dry ſmoke drawne from the earth, eaſie to fire: from exhalation ariſe fiery impreſſions which burne like fire, as pillers, dartes, candles, goates, ſhooting ſtarres, fiery Dragons, darke ſtreames, fooles fire, and ſuch like firery Meteors.

Mixed

Mixed fiery meteors whoſe exhalation is ſomewhat unpure thicker and long, her mixture is thunder which is a fiery exhalation, breaking forth of the cloudes, with a ſound. Lightening ſmall and great is a flaming light, of a burning exhalation, ſhining before thunder. Though we heare not the thunder, it is at the preſent breaking out of the flaſh, the eye being quicker than the eare. The great lightening is thicker and burneth more, if it be hardened with the heate of the Sunne, and it ſelfe, it maketh a ſtone which is caſt out at the cracke, this doth much harme.

Of Mixed fiery metcors, as thunder, what it is, and the reaſon of it.

Lightening is thicke or thin, this boreth through without leaving any ſigne of it. The thicker ſcorcheth and burneth, it hath much earthy matter, ſetting on fier ſteeples and ſuch like, and in great flaſhes is but ſome ſmall deale of this earthy matter, elſe all things would be fired.

Of lightning, what it is, and the reaſon of it.

Watery meteors, are vapors more fully compact together, and appeare in the loweſt part, or midſt of the Ayre, as cloudes and ſuch like. A cloude is a vapour joyned together by the extreame cold of the middle region. Cloudes hang in the Ayre by the Sunnes heat, which draweth them up, and by the moving of the windes are toſſed up and downe.

Of watery meteors, as clouds, what they be, with the reaſon of them.

In theſe Cloudes by ☉ and ☾, are framed divers ſhapes, having no proper matter, but onely appeare in the cloudes, either about ☉ and ☾, or oppoſite to them as:

Diverſe ſhapes in the cloudes, with the reaſon of them: as a falſe Sunne, how occaſioned.

A halfe Sunne which is imprinted in the Cloud by the reflection of his beames, in a cloud being wateriſh, ſo that ſometime the ſhape of 2. or 3. Sunnes are ſeene, ſo of the Moone. Bright circles of the cloudes, being

blacke,

black, are from the reflecting beames, ſeeming to compaſſe the ☉ or ☾ yet they are far lower. Theſe circles appeare more often about the moone: ſhee being not able with her beames to conſume theſe vapours.

A raine-bow how occaſioned.

The ſhape in the cloudes oppoſed to the Sunne, is the raine-bow of divers colours, in a hollow, thin and in an unequall cloud, faſhioned by reflection of the Suns beames, and the raine-bow is greater the nearer it commeth to the Horizon. If many raine-bowes be ſeene, the latter is made by the ſhining of the other, and are more obſcure than the former.

A deſcription of the raine-bow and the ſignes of it.

The colours of the Raine-bow, be light, red, green, ſky colour and yeallow: the raine-bow, is a foreteller of raine, it ſheweth that many vapours are diſſolued, which will ſhortly be raine. The hayle is like this, but it is alwayes under the Sunne.

Meteors of diſſolued cloudes.

Meteors of diſſolved cloudes, are either hardened, or moyſt, as raine, which is as it were a cloude melted and turned unto water; if the cloude bee neare the earth the drops are great, if hie, the drops are ſmaller.

Reaſon of it.

The rayning of frogges, fiſh, milke, fleſh, and ſuch like, come of ſuch matter being carried up, which doth againe fall with the raine, as wormes &c. are begotten of dead carkaſes in ſummer time.

Meteors made harde, after the cloud hath beene melted, are ſnow and Haile.

Snow what it is and how occaſioned.

Snow is a cloude, prepared for raine before it fall, being congealed by cold, is by the motion of the windes diſperſed into fleakes, and falleth onely in winter.

Hayle what it is and how occaſioned.

Hayle is rayne, made hard in the fall, the higher the fall, the rounder and leſſer, becauſe in the fall it melteth.

teth. It hayleth moſt in Autumne and in the Spring, for then the ſharpe ayre, hath moſt power over the drops, and in winter, the extreame cold maketh it ſnow being yet in the cloudes.

In the loweſt region of the Ayre, are dew and froſt. Dew is a vapour thickned with ſome earthly matter, which in falling is preſently turned into water. Dew what it is, and how occaſioned.

Dew falleth onely in ſummer, for then the vapour is diſſolved with the Sunne.

A fat kind of dew like melting hony, eſpecially at the ſhining of Syrius, being gathered from leaves of trees, is Manna, called alſo wilde honey, or meldewes.

This Manna hardened by the heate of ☉ into lumpes, is called Tereniabin. Manna what it is.

Froſt is a dewiſh vapour, made very hard by cold in winter before it be diſſolved. Froſt what it is, and how.

Meteors made of both kindes of ſmoake joyned together, are windes and ſuch like. Of Meteors cauſed by both kinds of ſmoake, and the reaſon of them.

Winde is a ſubtile ſmoke, beaten downeward by the cold in the middle of the ayre, and is moved ſideling on the earth: Auncients noted out 12. principall windes, all which in regard of matter are hot and dry, but differ for their ſituation of their qualities. Winde what it is, and the diverſe kinds of it.

The winde being great, carried with force, darkens the Ayre, and is called a ſtorme. If it doe roll about, it is a Whirle-winde, if it be but ſmall, it is called Ayre. Storme. Whirlewinde.

An Earthquake is a fume, contained in the earth: when it findeth no vent, it ſhaketh it, & is made according to the breadth or depth of the earth. In breadth it cauſeth ſometime ſuch trembling, that it ſhaketh downe whole Citties. That in depth cauſeth a gaping or ſwelling. A Gaping is when the Earth openeth, Earthquake.

as it were her mouth, and doth ſwallow downe trees, walles &c. A Swelling is when the earth being lifted up like a mountaine, either remaineth ſo, or elſe falleth downe againe.

Chap. V.

Of mixed living Natures.

NAtures mixed perfectly are living and corporall eſſences, indued with a Vegetative ſoule; A Vegetative ſoule is a facultie giving life to bodyes. Therefore ſo long as any part of this ſhall exerciſe her power in any body, ſo long is that alive, and remaineth ſafe. But her chiefe operation, and ſo life it ſelfe, conſiſteth either in preſerving ſeverall bodies or whole kinds. Nouriſhment is the preſerving of ſeverall bodies, and is the making of foode received, like to the body nouriſhed. Vnder that name is every thing which is received to ſuſtaine our bodyes, of which ſort is the ayre it ſelfe.

What a vegetative ſoule is.

The nature & office of it.

What nouriſhment is.

Some other faculties are required to perfection of nouriſhment, as concoction, and his companions: Concoction is a working or framing of nouriſhment, and it is made either of temperate, or increaſed heate of the parts to be nouriſhed.

What concoction is, with the neceſsity of it.

By temperate heate is made ripening: which is a concoction of nouriſhment with moiſture, by how much therefore the moiſture ſhall be better tempered with heate, by ſo much is the ripening ſooner, and more perfect, as in a ſummer too moyſt, the increaſe of the earth is later made ripe. Concoction ariſing from greater ſtore of heate, is either elixation or aſſation.

The neceſsity of temperate heate for nouriſhment cleared by comparison.

Elixation

Elixation is a concoction more perfectly working the thicke or watrish moysture, with a strong moyst heate: As flesh is sod in water, whose moyst heate altereth & consumeth the fomy moystnes of meate: if this Elixation remaine unperfect, it is called rawnesse, and the nourishment is not refined, for want of moyst heate: For it was not of power to finish concoction.

Assation is concoction, by meanes of dryer heate fully strengthening the moysture of nourishment. If this strength of bodyes be somewhat weake, it is called thickning; if concoction bee vicious, it is turned unto putrifaction. Moyst and hote things doe most easily corrupt, if the bodyes be not open to the Ayre. The benefit of good, and the hurt of bad concoction.

In stopped bodyes, heate having no vent is increased. Whence commeth inflammation, which putrifaction doth follow, causing greater heate. This of concoction. Whence inflammation ariseth.

The Companions of concoction, are Faculties, fitly serving for the perfection of it. The companions of concoction.

Of these, one goeth before, the other followeth. The former is Attraction and Retention.

Attraction is a faculty, supplying matter of convenient nourishment, as is seene in things drawing out of the flesh Arrow-heads or thornes deepely fastned. So wheat draweth water out of on earthen pot, it being set upon the heape. 1. Attraction, what it is.

Retention which retayneth nourishment, untill it be concocted, & doth nourish the body. Nourishment, is first put to and afterward united. The companion following concoction is expulsion. 2. Retention, what it is.

Expulsion, is a driving backe of unprofitable matter: when concoction is once made, it is within or without 3. Expulsion, what it is.

the body. Within, when the ſtronger thruſt ſuperfluities to the weaker, untill they come to the weakeſt of all. Encreaſe which is joyned to the nouriſhment, is continued but to a certaine age, & then the nouriſhing growing weake it ceaſeth. Now followeth conſervation of the whole ſtocke.

What generation is,

Generation is a facultie of the body, procreating any thing like it ſelfe. This faculty preſerveth all kindes of things in their eſtate, though continually they doe periſh.

What is the object of it.

The object of generation, is the procreating ſeede of every thing.

The changing faculty, altereth the ſeede into parts of the body to be begotten.

The miniſteriall vertues of this facultie of generation, doe change or forme.

The forming faculty faſhioneth the thing into diſtinct forme.

Chap. VI.

Of Minerals and Mettals.

THe Vegetative ſoule being explained: now follow the kindes of ſuch natures as have perfect, or unperfect growth. Thoſe of unperfect growth are Mettals, which are decocted in the veines of the earth. Mettals are to be melted eaſily or hardly. Thoſe that are eaſie to bee diſſolved, are either firſt, or ſuch as ſpring from them.

Brimſtone what it is, and the nature of it.

Principall, or firſt, are of themſelves from the originall, as Brimſtome, and Quickſilver.

Brimſtone is the fat of the earth, with fiery heate decocted

coſted unto his hardneſſe, which is the cauſe that it ſo ſpeedily is enflamed, and burneth even in water, yea ſooner than the fat of the beaſts, which though it bee fatter than brimſtone, yet it is farre colder. So that for his fat drineſſe, it helpeth ſcabbes of all kinds, and the leprie.

That Brimſtone is counted the beſt, which is greene and cleare.

Quickſilver is a ſlimy water, mixt with a pure white earth, which mettall for the matter whereof it doth conſiſt, is thinne, cold, and heavie. Quickſilver, what it is.

It is in continuall motion, and his thinneſſe cauſeth that it pierceth mettals. The nature of it.

Mettals derived from the firſt, are more or leſſe pure; purer, are Gold and Silver. Gold is a mettall made of moſt ſubtile and pure red brimſtone, and of the like quickſilver. Gold hath the moſt perfect mixture; as it is moſt thin, ſo it is moſt ſolide, whoſe ſubſtance is not corrupted, with either earth, water, or ayre, nor conſumed with fire, but is more purged in it. Gold what it is.

And for his thin ſolidneſſe, it is moſt ſoft, and eaſie to be melted. So that is moſt worth, which is moſt red and gliſtering, and ſoft, that eaſily it may be wrought. The nature of it.

Experience teacheth, that the 3 part of one graine of gold can gild a wyre of 134 foote long: upon plates of ſilver, one ounce of gold will ſuffice to gild eight pound waight of ſilver. His nature is to bee marvelled at. It waxeth cold towards day light, ſo that thoſe that weare rings of it, may perceive it, when it waxeth day.

It is found in the mountaines of Arabia and elſe where; and the beſt, in the mountaine Terrat, neare the Citie Corbachiam. Where it is found.

Silver, what it is.

Siluer is a mettall begotten of pure white Mercury, and the like cleare white Brimſtone. It differeth from Gold almoſt onely in colour, it being Gold not perfectly refined; yet in pureneſſe, firme ſolidneſſe, and thinneſſe, it is next to Gold, and one ounce of it may be drawne 3200. foote long, ſo that it can ſcarce be diſcerned from Gold. Yet it is thicker an hundreth fold.

The difference betwixt it and gold.

When it is found, it hath the ſhape of haires, twigs, fiſhes, ſerpents, and ſuch like.

Mettals leſſe pure, conſiſt of greater ſtore of Brimſtone or Quickſilver; of greater ſtore of Brimſtone, come Braſſe, and Iron.

Braſſe what it is.

Braſſe is a mettall, begotten of thicke red Brimſtone, and Mercury ſomewhat impure; that comming from Cyprus, is called Copper: the matter of Braſſe is more burnt than that of other mettals, and indureth long, and is fit in any worke. For it is without all moyſture, whether it be kept in earth or water. Minerals neare Braſſe are Copperaſſe, &c.

Copperaſſe, what it is.

Copperaſſe, is a minerall mixed of humours ſtrained by droppes into ſmall holes, and it ſhineth like glaſſe.

The nature of it.

It is hot and dry in the 4. degree, vehemently binding, being of great force to ſeaſon and preſerve raw fleſh. It alſo begetteth ſound fleſh in feſtered ſores, and ſtancheth blood. It is of a greene, yellow, and a skye colour, the beſt hath in it white ſpots; his kinde are Romane vitrioll, and red vitrioll, or the ſome of Copperaſſe.

Iron, what it is.

Iron is of ſtore of Mercury, and of thicke ſulphur, impure and aduſt. It may be ſoftened by quenching in

The nature of it.

juyce of beane ſhuls or mallowes. It being red hot

and

and cooling of himselfe, becommeth plyable.

But if it be often quenched in cold water, it becommeth thereby, very hard and brittle.

Mettalls of greater store of Mercury, are Lead and Tynne.

Lead is an unpure mettall, begot of much unpure, thicke and drossie Mercury, and likewise of unpure Brimstone; his impurity causeth blackness, which by refining is made whiter. It increaseth in waight, if it lie in moyst ground. Lead, what it is.

Yea it is thought to increase with raine. It is of a cold and binding nature, and therefore scarce wholsome for mans use. The nature of it.

Tynne is a mettall mixed of Mercury, white without and red within, and of Brimstone not well mixed, as it were Lead whited with silver. Tynne, what it is.

Thus farre of mettalls pliable.

Mettals lesse plyable are those which are not easily wrought, or melted, and are hard or brittle.

Those that bee altogether hard, are stones. These are ingendred of a watry moysture, and fat earth mixed hard togeather. Of stones, some be rare, some common. Of the rare and strange, some are of more estimation than others. Stones, where of they are, &c. the variety of them.

The more esteemed are precious stones, which are more beautifull and fine, in regard of their pure and subtile matter: Of Gemmes some are of one coullour, some of sundry colours. More or lesse transparent be either white, or of other colours. Precious stones.

White are Crystall or Adamant. Crystall is a gem, bright through, begot of a most pure stony moysture, and is found in mines of Marble, &c. His qualitie Crystall. The nature of it.

tie is binding: therefore his oyle or powder is helpefull in Laxes, and increaſeth milke in womens breſts.

Adamant. The Adamant or Diamant is a gem cleare and moſt hard, it can ſcarce be broken (and thence it is named) unleſſe ſteeped in the warme bloud of a Goat that hath drunke Wine or eaten Parſley.

The nature of it.

Tranſparent Gemmes not white, as the Saphir, Sardonix, and Smaragde, have the ſame coullour in all their kindes.

Saphir. The Saphir is a gem cleare through, of a skie coullour, growing in the Eaſt, and ſpecially in India: Being drunke, it helpeth againſt the ſtinging of Serpents, poyſon, &c. as ſome affirme.

The nature of it.

Smaragde. The Smaragde is of a greene coullour, making greene the ayre neare about it; the ſtone of Brytaine is the beſt. It preſerveth the wearer from the falling ſickneſſe: eyght graines of his ſhaving drunke, expelleth poyſon, &c. as ſome affirme.

The nature of it.

Sardonyx. The Sardonyx is a cleare gem, repreſenting in coullours the nayle of a mans hand: it preſerveth chaſtnes, and healeth vlcers about the nayles.

The nature of it.

Selenites. The Selenites is a tranſparent gem like glaſſe, it ſeemeth to increaſe and decreaſe with the moone: whoſe ſhape in the night it beareth, and is called therefore the Moone-ſtone, &c. It is of a white, blacke, and yellow coullour. His ſcrapings heale the falling ſickneſſe. Bright ſhining Gems doe follow.

The nature of it.

Carbuncle. The Carbuncle is a gem ſhining in the light like fire: it is the nobleſt, and hath moſt vertues of any precious ſtone.

The nature of it.

Calcedonian. The Calcedonian is of a purple coullour, ſhining like a ſtarre, it expels ſadnes and feare by purging and chearing

chearing the ſpirits. It hindreth all viſions.

Aſtarites. The nature of it.

The Aſtarites is a Cryſtalline ſtone, having in the middeſt like a full moone. Bright ſtones not ſhining do follow: or the leſſe ſhining.

Rubie. The nature of it.

The Rubie is a red gemme, ſhining in darke like a ſparke of fire: it cleareth the ſight, it expelleth ſad and fearefull dreames.

Topaz. The nature of it.

The Topaz is of the colour of gold, caſting beames in the Sunne: being layd to a wound, it ſtancheth blood: or caſt into hot water, keepeth the hand from ſcalding.

Hiachinth. The nature of it.

The Hiacinth is of wateriſh colour, it is exceeding hard, and cloudie in the darke, but pure and cleare by day. It is colde, moderating the ſpirits of the heart and of the other parts, and cauſing mirth, which being worne obtaineth favour.

Precious ſtones of leſſe ſhining, be Corrall, Asbeſtos, Magnes, and Galacte.

Corrall. The nature of it.

Corall is a ſtone growing in the Sea like a ſlimie ſhrub, which by the ayre preſently is made hard. It is taken up full of moſſe, but being unbarked, it appeareth cleare in his proper colour. The ſpongie Corrall is white and colde. The ſolid is more ſtonie, and is red and blacke. Red and full of branches is the beſt, which worne of one ſhortly to be ſicke, waxeth pale. His tender ſubſtance is affected by the bad vapour, which yet is unable in the body to afflict it. It is good for ſore eyes, for the ſtone, and falling ſickneſſe.

Asbeſtos. The nature of it.

Asbeſtos is of an Iron colour, being once fiered, it cannot be quenched: it is found in Arabia.

The Loadſtone. The nature of it.

Magnes or Loadſtone is of a skie colour, or an Iron colour: It draweth Iron. It hath like vertue

with the Adamant. It purgeth the dropſie, helpeth the flux; reſpecteth the North and South pole.

Galactites. Galactites is of an Aſh colour, it ſeemeth to ſweat as it were milke, it increaſeth milke, and helpeth running of the eyes, and ulcers.

The nature of it.

Now follow ſtones of divers colours.

Achates. Achates is a ſtone of divers colours, reſembling a Lyons skin: ſometime it is blacke with white veynes and yellow: ſometime it is as it were ſprinkled with bloud, it is very variable in colour. Eagles lay it in their neſts to preſerve their young from poyſon.

The nature of it.

Turcois. Turcois is darke, of a skie colour, and greeniſh: It helpeth weake eyes and ſpirits.

The nature of it.

Corneolus. Corneolus is like water of waſhed fleſh. It helpeth againſt the Pyles in the fundament, and to ſtop fluxes. In a ring it reſtraineth anger.

The nature of it.

Chryſopraſus. Chryſopraſus is of a greene colour with golden ſpots. It ſhineth a little in the darke, it is rare and deare. It comforteth the heart, helpeth dim ſight, &c.

The nature of it.

Hematite. Hematite is of an Iron colour with bloudy veynes: It is cold and dry, cooleth hot waters, ſtancheth bloud, and helpeth againſt the ſcorching of the Sunne, as Authors write.

The nature of it.

Alſo the qualities of other ſtones depend rather upon authoritie than upon proofe.

Stones be found in Beaſts, Birds, and Fiſhes.

Stones found in Beaſts be;

Chelidonius. 1. Chelidonius is a ſmall ſtone in the belly of yong Swallowes. It is found in thoſe of the firſt hatching in the new moone: if two be found, the one is red, the other blacke. The beſt is of a ſprinkled red. The red in a linnen cloath carried under the left arme, expelleth

The nature of it.

madneſſe,

madnesse, the falling sickenesse, and getteth favour, say some.

2. Alectorius is of a christall or watrish colour. It is found in the Maw of an olde Capon: as big as a beane in one of nine yeere old, small in one of five yeere olde. This stone quencheth thirst, being held in the mouth, It maketh warlike and couragious. Alectorius. The nature of it.

3. The Rubet or Toadstone, groweth in the head of a Toad: It is of a white browne colour, sometime it hath a skie coloured eye in the middle: It is to bee taken before the Toad touch any Water. It is a remedie against all poyson. If it come neare poyson, it changeth colour, and sweateth as it were drops. Toadstone. The nature of it.

In fishes are found stones which are made of the cold hardening their matter.

4. The Crabs eye, of the female, is like an eye, it dissolveth bloud congealed, and expelleth stones. Crabs eye. The nature of it.

5. The Perch stone found in his head, is white and as big as Hemp-seed. Perchstone.

6. The Carpe stone found in his chap, is triangu-ler, white without, yellow within. It helpeth against aboundance of choller. Thus farre of precious stones. Carpestone. The nature of it.

These following are of price because of their beautie, but not so rare.

Porphirite, is a Marble shining like purple. Alabaster is a marble like in colour, to spotted Honny. At this day it is cleare, and smooth, like Plaster. Porphirite. Alabaster.

The Ophite is a most hard marble, of a sad greene spotted, and serpent-like colour. Ophite.

Common stones are of unpure slimie earth, thicke, Common stones.

and darke: ſome be ſolid, as the Flint, Boulder, the Whet-ſtone, &c. Some be full of pores as the Pumiſe, Gravel-ſtone, and free-ſtone.

Salt, what it is. Salt is a fryable mettall, begotten of a wateriſh and earthy moyſture, mixt and decocted together: It

The nature of it. bindeth, ſcowreth, purgeth, diſperſeth, repreſſeth, maketh thin and hard. It is gotten in pits or waters. The ſorts of digged ſalts be:

Salt Amonaick. Salt Amoniack is found in plates under the hotte

The nature of it. ſands of Cyreniæ. It is hot and dry in the fourth degree, and ſerveth to purge ſlimie humors. That which Apothecaries ſell in blacke clods, is made of Camels ſtale, and becauſe ſtore of Camels be in Armenia, it is called Armeniack.

Salt Peter. Salt Peter is found in dry places under the ground, and in hollow Rockes: It is ſometime called Nitre, of a Region in Egypt. Of this kinde is the ſalt called Borax.

Salt Gem. Salt Gem, is a white kinde of Even-ſalt, ſhining like Cryſtall: It is alſo called Stonie, marbly, ſalt Sarmaticke, or Dacian.

Salt of Indie. Salt of Indie is blackiſh Salt, or ruddy. It is in clods cut out of mount Oremen.

Salt of water. Salt of Water is taken on the Sea coaſt, or from ſome lakes and ſprings, and it is ſod and congealed of the Sunne, or by fire.

Allome. Allome is a ſalt ſweat of the earth, it is either liquid or hard.

Liqu'd Allome. Liquid Allome is called Roch or Rock-Allome, with it is paper waſhed, &c.

Hard Allome. Hard Allome, or Allome Sciſſile is thicke, and cleaveth: It is as it were gray.

Bitume

Bitume is a fat and tough moyſture, like pitch, and is called Earthy pitch. Bitume.

Liquid, is like an oylely moyſture flowing, and is of divers colours, after the varietie of the place, of which Naphtha is a white fat of Bitumen, which enflamed by water, doth eaſily draw to it fire, through ſtore of oyle that is in it. Liquid Bitume.

Naphtha Petreolum is found in rockes. It is for his fatneſſe of ſome called Oyle. Naphtha Petreolum.

Ambar of Arabia is Bitume of an Aſh colour. Ambar of Arabia.

Hard Bitume is tough, like foam ſwimming on the water, but being taken forth, it waxeth hard: of this kinde is *Aſphaltus*, which is blacke Bitume, hard like ſtone pitch: The beſt is gotten in the dead Sea of Iudea. &c. Hard Bitume.

Piſſaphaltus Aſphaltus, ſmelling of Pitch, mingled with Bitume: It is called Mummie. Where this wants, they ſell us counterfeit of Syria; for poore men that die there, be ſtuffed with Bitume, but the rich are dreſſed with Mirrh, Alloes, &c. Piſſaphaltus.

It alſo is found in clods rolling from mount Ceravine into the Sea.

Succinum is Bitume, like a ſtone, exceeding hard, named, Ex ſucco, the Iuyce of the earth. It is white or yellow, which is called Ambar, or blacke as Iet. His fatneſſe is ſo great that it burneth like a Candle, and ſmelleth like the Pine tree. It draweth to it chaffe, and ſuch other light ſtuffe, by a certaine hid nature. Succinum.

Metallar Earths which are digged forth of mines.

Terra Lemnia, an exceeding red Earth of Lemnos Ile, digged in a red hill: It is ſometime uſed for Armenian. In old time this had Dianaes ſeale upon it, Terra Lemnia.

printed by her Prieſts, who were onely wont to waſh this earth.

The nature of it. It is of force to expell poyſon, it healeth wounds feſtred and old, and poyſoned.

Bole Armenian. Bole Armenian, is earth of Armenia, it is of a pale
The nature of it. red colour, ſmooth, and eaſie to breake as chalke: It is a dryer, and profiteth againſt all fluxes.

Terra Samia. Terra Samia is white, ſtiffe, and tough, comming from the Ile Samos.

Ampelite. Ampelite is a pitchie earth, cleaving and blacke, it is named of annoynting Vines, to kill the wormes. This earth is like that we call Stone, or Sea coale.

Chalke. Chalke is white earth of Creete, and there is found of it in many other places.

Black Chalke There is alſo ſome found that is blacke, which is called Pignitis.

Chap. VII. *Of Natures perfectly living.*

SO farre of Minerals; Now follow Natures perfectly living.

What natures perfectly living are. Natures perfectly-living, are Plantes, or bodies endowed with a ſoule. In all theſe bodies are ſundry vertues, according to the temperature of the principall qualities. For the forme uſeth their qualities as Inſtruments: Whence come diverſe diſtinct degrees of thoſe qualities, as ſome are hot, cold, dry, moyſt, in the firſt, ſecond, third, and fourth degree. The qualities in the firſt are obſcure, and ſcarce to be perceived: in the ſecond they are apparant and manifeſt: in the third they be vehement: and in the fourth immoderate, and not to be indured. And againe each of theſe hath a beginning, middle, and end.

Plants

Plants grow from a ſtalke or a trunke. Thoſe from a ſtalke have but one ſtalke or many. Trees are Plants having but one ſtalke, full of Boughs, and riſing on high from the earth. Some grow onely in hot Countries: others grow indifferently in all places: thoſe that proſper beſt in hot Regions, are Frankincenſe, Mace, Pepper, Palme, Balſame, Pomegranet, Lemmon, Ceder. Plants.

The Frankincenſe tree groweth chiefly in Arabia; it is tall, and hath leaves like the Maſtike tree, his gum is ſoft, white, fat, and round, and is apt to perfume, and the ſtiffer and liker Roſen it is, ſo much the better. This perfume was uſed for ſacrifice. Frankincenſe tree. The nature of it.

Myrrhe is a tree in India, of hard wood, wrythen towardes the earth, with a ſmooth barke, the leaves ſharpe poynted towardes the end: his gum is fat, like Roſen, thicke, and ſhining red. The diſtilled liquor of freſh Myrrh was once called Stacte, but now it is named Storax. It is hot and dry in the ſecond degree. It dryeth & cloſeth wounds, it expelleth the wormes: it is of force againſt an old cough and ſhort winde. It is bitter: It is good to heale wounds of the head. Myrrhe. The nature of it.

Mace is an Indian tree, grown in the Ile of Banda. It is almoſt like the Peach tree, it hath narrow and ſhort leaves, whoſe fruit is the Nut-meg covered with Mace. Mace.

The Nut-meg hath an huske like a Filberd: the fruit is covered with a rinde like our Wal-nut, which with ripeneſſe openeth and ſheweth the Mace, which doth cover the Nut-meg, &c. Nutmeg.

The new and beſt Nut-meg is full of juyce or oyle, ſmelling ſweete. It dryeth and heateth in the ende of the ſecond degree, with a kindely binding.

Pepper groweth in India. Of it be two ſorts of trees, Pepper.

and

and two ſorts of fruits, one long, the other round. The round groweth on branches like vines, which imbraceth trees that ſtand by it; and his fruit is in cluſters, firſt greene, then being dryed, it turneth blacke and rough: it is gathered in October.

The nature of it. Long Pepper groweth like the long bud on Nut-trees. It is hot and dry.

Palme tree. Palme tree groweth moſt in Egypt, and Arabia, alwayes greene, with a long round bodie; his barke is like ſcales of a Fiſh, and the more it is preſſed, the better it groweth: therefore was it uſed as a reward for the Conquerour.

Wilde Palme tree. The wild Palme in India, is called Thamarind, the Date is his fruit, it being ripe is blacke and ſweete:

The nature of it. Of theſe bee three kindes. Our Dates come from Egypt: they are hot temperately.

Balſame tree. Balſame is a low tree, his trunke is not much unlike the Turpentine tree; it hath leaves like Rew, but wither, never falling. It groweth in the valley of Hierico, and Egypt: being cut it ſendeth out a milkiſh li-

The nature of it. quor: it is to bee cut in the uper part of the barke with glaſſe or bone, and not with Iron, leaſt it die. His juyce is gathered with wooll into ſmall hornes: of it is ſcarce got each yeare ſix Congies: a Congie is about three Pints.

Balme. Native Balme mixed with milke doth eaſily ſeparate: and eaſily diſſolve in water, neither doth it ſtaine

The nature of it. cloth. It is hot and dry in the ſecond degree: it is of thin parts, and hard to come by. In his ſtead moſt commonly is uſed the Oyle of Nut-megges.

The

The Pomegranet
The Orange } doth follow.
The Cedar tree.

1. Pomegranet is a low tree, that hath narrow shining leaves, red flowers, and his fruit filled with graynes. It came from the Country in which Carthage stoode; The juyce of this Apple helpeth the stomacke: It is very good in a burning Fever. Pomegranet. The nature of it.

2. Pomecytron, Lemmon, and Orange trees, are alwayes greene, the leafe of the Cytron is like the Lawrell, endented. The fruit is rough, and alwayes fruitfull; his juyce cureth inflammations, and other diseases in the skin: the barke comforteth the heart, &c. Pomecytron. The nature of it.

The Orange hath a smoother skin, and leafe. Orange.

3. The Cedar is like to Iuniper, his leaves being sharper: the tree is exceeding tall, chiefly of that of Cyprus; It never rotteth, his nature destroying sound things, preserveth corrupt things. Cedar. The nature of it.

The trees lesse hot are either fruitfull or barren. The fruitfull have fruit that have a rinde thicke, or thin. The thinner rinde is of Apples, or Berries. Apples are round, as the Fig, Olive, Plum, Cherry.

The Fig tree is not high, it hath a smooth barke like the Walnut tree. It yeeldeth a long fruit like a Peare, full of graines. It is so fruitfull that it bringeth forth three or foure times in a yeare: so that one Fig thrusteth off another. They are of two kindes, great and little. Figtree.

The Olive: the Apple tree: and Peach be common.

The Quince tree is lower then an Apple tree, his fruit hath downie hayre; it is called Cidonia, of a ci- Quince tree.

The nature of it. tie in Crete, where firſt it grew. The fruit is cold and binding, and doth much profit hot ſtomackes.

The Peare, the Plum, the Medler, and the Cherry be common.

Now follow thoſe trees that beare Berries.

Lawrell tree. The Lawrell is a tree growing in hotter countryes; which in colde doth hardly proſper; it hath ſharpe and thicke leaves ever greene, with a thin ſmooth

The nature of it. barke: His leaves be hot and dry, his oyle for hot and ſoftning nature helpeth diſeaſes of the breſt; and other ſpringing of colde. The powder in wine cauſeth urine, breaketh the ſtone of the bladder and reynes.

Iuniper tree. Iuniper beareth a ſmall fruit, the ſpace of two yeares, and before the firſt bee ripe, it bringeth forth other. This tree hath ſhort and ſharpe leaves, and a ſtraight backe, and ſlit almoſt in every place: the gum ſweating out of is, Vernix, called ſo becauſe it congealeth

The nature of it. in the ſpring. It is hot and dry in the third degree. It healeth and gleweth, and alſo heateth a colde ſtomacke. His berries are hot and dry in the firſt degree, comforting the ſpirits, and healing putrifactions. It conſumeth rotten and moyſt humors. The oyle helpeth the Gout, if you annoynt the backe-bone therewith: it cureth deafeneſſe, and eaten helpeth melancholy, and ſtayeth the Rheume, and the Flux.

Now follow trees whoſe fruit hath a ſhell.

1. The Almond tree.
2. The Walnut tree.

Cheſnut tree. 3. The Cheſnut tree taketh his name of a towne in Magneſia, the tree is much like the Wallnut, yet the leafe hath more veines, and his edge like a Saw. His fruit is covered with a ſharpe huske, and within it hath

a

a red huske. It is of two kindes: both hot and dry in the firſt degree; and for their earthie matter binding. They are hard to diſgeſt, and beget lice: but good if roſted and eaten with Salt, Pepper, and Sugar. The nature of it.

The powder of dry Cheſnuts voydeth Vrine.

The Beech is tall with a thicke white barke, or a ſad red. It hath leaves like Lawrell, nicked on the edge. His fruit is a theerangle Nut, cloſed in a little pricking huske. His fruite is hot, ſweete, and binding. His leaves are coole, which being eaten, doe helpe much the griefe of the gums and lippes. If they bee ſtamped, they much ſtrengthen dead members, being anoynted with it. Swine and Miſe delight much in this fruit. Beech tree. The nature of it.

Trees whoſe fruit is but halfe covered.

The Oke is a tall tree, having a thicke rough barke, his leaves are deepe gaſhed, and his boughes are knotted: his proper fruit is the Acorne: the gall and his glew are but accidentall. It is moderately hot and dry, it bindeth, and eſpecially the little skin which covereth the Acorne. Diſtilled water of Oke leaves cureth Fluxes, and rottenneſſe of the Liver: and expelleth all congealed bloud. His leaves ſtamped and applyed to greene wounds heale them. Oke tree. The nature of it.

Likewiſe they draw heate from ſwellings and pimples ariſing by heate.

Galls grow eſpecially in olde Okes, and in the night, in the Summer, the Sunne then leaving Gemini: they bee of two ſorts; ſmall and rough, and great and ſmooth.

Galls have in them ſometime Spiders, Flies, and Ants: Some thinke Spiders doe preſage peſtilence,

Flies warre, and Ants dearth. The powder of Galls doth heale wounds without any ſcarre. Robur is very hard and during: It hath leſſe fruit.

Ilex tree. The Ilex is very tall with leaves, Lawrell-like, ever greene, but leſſer and ſharpe: a thicke wood, and of a blacke red colour; and is very rare.

Corke tree. Another kinde is the Corke tree, having like leafe, fruit, and greenneſſe, yet is it leſſer, and hath a moſt thicke barke, which though it bee taken off, yet doth not the tree wither: it is called the female Ilex: his wood is full of pores and holes, and moſt light, and not to be ſunke.

The nature of it.

Now follow trees that beare gum, whoſe Nut hath ſcales.

Pine Apple tree. The Pine apple is a Tree full of boughes, with hayrie leaves like Combe teeth, of whoſe ſharpe top it takes his name. His fruite is Pine-nuts, theſe are hot and dry, and binde. They are good againſt coughs, and conſumptions, ſtrengthening, and heating.

The nature of it.

The wilde Pine is a great high tree with hairy leaves.

Pitch tree. The Pitch tree is tall with a blacke barke, tough and ſtiffe, and running along his boughes like a croſſe, from both ſides of the trunke: his leaves are broader, ſofter, and ſmoother than Roſemary. From betweene the barke and wood of this tree floweth a gumme like Rozen.

Firre tree. The Firre tree is a kinde of Pitch tree, but ſomewhat whiter, his leaves on one ſide are of an Aſh colour: from this floweth alſo a Rozen, which ſod with honey profitteth againſt the deſtillations of the head and throat, againſt the Quinſey and other maladies; it aſſwageth the inflammation of woundes, and joyneth them:

them: it sodden with Barley bran and wine, cureth hard kernells.

The Larix is a high tree with a thicke barke clifted on each side: his boughes grow by degrees about the trunke: his leaves are thicke, long, soft, and hairie; his fruit is almost like the Cypres, and hath a pleasant smell. The wood of this, for that it is dry and full of Rozen, burneth vehemently, and soone melteth mettall. His Rozen is in smell, taste, and working better than common Turpentine. Larix tree. The nature of it.

In colour it is like honey, tough but not hard. In the body of the tree groweth Fungus Agaricus, a swamp or mush-rome. The best is white, thin, full of pores, light, and easie to breake: it purgeth fleame.

Now follow trees that bring forth no fruit of note, called Barren-trees.

The Elme is tall with rough leaves and sharpe: his wood is yellow, hard, & deformed: the barke, boughes, and leaves have a healing faculty in scabbes. It also closeth woundes. Elme tree. The nature of it.

The Alder hath a long straight trunke, his wood is soft, his leafe like Peare-tree, but greater, thicker, and rounder: it groweth in moyst places, and by rivers. His wood is hot and dry, and indureth long under the earth, or in water. His thin and fat leaves layd upon tumors with hot water cure them, and helpe all swellings. Alder tree. The nature of it.

The Teile is a large and broad tree, with a thicke stalke: his leaves like Ivie, but softer and sharper. It bindeth: his other qualities are like the wilde Olive. Teile tree. The nature of it.

The Boxe hath little round leaves alwayes greene, his stalke is rough, for most part full of knotts, and Boxe tree,

blacke: the wood is hard and heavie, it ſinketh in water, and never decayeth with age. Of this, boxes are named, becauſe moſt of them were wont to be made of Boxe. It is dry and binding; the powder of his leaves, with Lavender and water, profitteth againſt madneſſe. Lye of Boxe maketh yellow hayres.

The nature of it.

Birch tree. The Birch is a tender tree, his barke is blacke at firſt, but after white; his wood is ſoft and weake above other. It hath a ſweete ſap; In the rude age, his barke was uſed for paper. His ſap taken in the Spring helpeth the ſtone; laundies, and rottenneſſe of the mouth; alſo being put in milke, preſerveth the Cheeſe made of that milke from Maggots.

The nature of it.

Willow tree. Willow groweth apace, it endureth long, for though it bee hollow and rotten, yet it liveth. It is of two ſorts, ſolid or brittle: the ſolid is blacke or yellow: the blacke is the greater and better, and is moſt apt for binding.

The yellow groweth chiefly neare water, it is ſometime white. The brittle Willow is moſt white, and unapt for binding. Willowes are dry and thicke: his leaves and barke ſod in Wine, helpeth gripings of the belly.

Poplar tree. The Poplar delighteth in moyſt and watriſh places. It is white or blacke: the white hath a long ſtraight trunke, and a ſmooth barke: his leafe round, and after ſharper, greene beneath, hoarie above, and do continually ſhake; it is moderately hot and dry. The roote taken in drinke, defendeth from gripings in the belly. Blacke Poplar is like the white, but greater, ſofter, and hath narrower leaves, and greene below, and of an Aſh colour above. It is hot and dry: the boughes

The nature of it.

held

held in the hand (some say) forbid wearinesse of hand and foote: his gumme stamped helpeth loosenesse.

Now follow shrubs, which spring up with many stalkes; and are noble or lesse noble: The noble, as first, Cinnamon, which is a barke of a shrub of that name growing in India: of a blacke colour, with thin boughes, which if they be broken, cast forth a sweete sent: His barke is of two sorts, thicke and thinne. The thinne is of the sharpest and best taste. The thicke is more slowly digested, it comforteth the heart: the best is red and sharpe with some sweetnesse. It is of subtile parts, hot in the third, and dry in the second degree. It helpeth a colde stomacke, it strengtheneth the sight, heart, and liver, and begetteth pure blood. Shrubs. Cinnamon. The nature of it.

Cassia Fistula, is a round, great, and purple Cane, having a very blacke pith; the heaviest and reddest Canes are best. Of the blacke pith is made a good and gentle purgation, called Cassia extract. This helpeth much against feavers, and many other diseases, if one ounce of it be taken with as much Rose water. Cassia Fistula. The nature of it.

Shrubs lesse noble.

The Hasell is an high shrub with a slender stalke, and full of white spots. His leaves are broader, and have more gashes than the Alder. The tree beareth the Filberd, and the Nut: these Nuts are hot and moyst, and make fat, but hurt the stomacke, and procureth a laske. If stamped in water and sugar, they bee applied, they helpe an old cough. The ashes burnt with Swines or Boares grease, and applyed to the head, causeth the hayre to grow. Hasell. The nature of it.

The Elderne hath boughes of an Ash colour, and Elderne,

in

in it is store of pith, and his leaves are much like to those of the Wal-nut tree, it beareth purple berries, having red iuyce.

Dwarfe Elderne is low & short, with a foure-square stalke; these plants are hot and dry, and have power to purge and digest: Also it healeth and closeth; the roote or leaves of Elder sod in wine, purge the dropsie, and nothing is more effectuall to that purpose than the roote of Dwarfe Elderne. Water in which the leaves of Elderne are sod, helpes to rid the dry cough. The Pitch or an electuary of the berries, expelleth sweate, and all poyson.

The nature of it.

Barberries.

Barberries are not much unlike the wilde Peare; although they bee farre lesse, and in the boughes some two or three prickes grow together. His leafe is like Quince leaves, but narrower. Barberries bee hot and dry in the second degree. The iuyce of the berryes profitteth against inflammation of the Liver, as also against inward impostumes: if it be applyed with nightshade, it quencheth thirst. The barke of his roote or fruit stamped, plucketh out a thing fast in the flesh: his syrrope tempered with sugar comforteth the hart, restoreth appetite, profiteth against burning Feavers, and all inward diseases of much blood.

The nature of it.

Small Rayſin.

The small Raisin hath purple boughes, and pampin leaves, but lesse, and of blackish greene: it hath round red berries, upon long stalkes; his fruit and leaves are colde and dry in the second degree, having power to close. The iuyce of the fruit taken, helpeth against trembling of the heart, & inflammations of the bodie; but chiefly it helpeth the plague: his iuyce with Endive water profitteth to remove specks of the face.

The

The Roſe groweth up with ſmall twigs, of a blacke greene, full of crooked prickes; his leaves are dented on the edge; his fruit, namely, Roſes bee of diverſe colours. All Roſes bee colde and dry, and helpe both inward and outward affections of the body. Roſe. The nature of it.

The juyce ſod in Wine helpeth griefes of the head, eyes, and gums. Honey and Roſe water ſtrengthen all parts, and purge melancholy and fleame; ſodden with Fennell and Salt, his oyle healeth burnings, and layed on the forehead taketh away heavineſſe, and hot ſickneſſes. The ſunge of wilde Roſe trees in powder with wine expelleth the ſtone. Water of Roſes helpeth ſore eyes, comforteth and cooleth the braine, it being drunke, relieveth the heart and ſtomacke: it keepeth the ſpirits, and naturall heate.

The Bramble is full of prickes, and crawleth about: the leaves of ſweete bryer on the one ſide are white, on the other blacke; his fruite is the blacke berry, full of juyce, the berry is dry, colde, and cloſe. His fruit, leaves, or ſprouts quench inward heate. The top of his leaves ſod in Wine ſtay the bloudie flixe, helpe ulcers of the mouth, and faſten looſe teeth. Bramble. The nature of it.

Poterion, uva criſpa, Gooſeberries is full of boughs, hath aſh coloured barke or white, full of ſharpe thornes, his leaves are leſſe than ground Ivie and crooked, his berries from greene turne to reddiſh: it is cold in the firſt, dry in the ſecond degree; his greene leaves cure inflammations, and apoſtumes, and aſſwage *Ignis ſacer*. Gooſeberries. The nature of it.

Colutea in leaſe not unlike to Fengreke, hath a round fruit, as big as a Lentle in a puffed ſhell. It is hot in the beginning of the ſecond degree, and dry in the Colutea. The nature of it.

The nature of it. first: it purgeth the panch: scoureth away chiefly melancholy, without trouble, from the head, braine, and the Instruments of the senses.

Thus farre of Plants growing from a trunke or stalke, &c.

Herbes. Now follow Herbes which have but a thin small stalke, consisting most upon leaves: These doe nourish more or lesse, as Corne and Pot-herbes, which nourish more.

Wheate. Wheate is a kinde of Corne, having an eare upon

The nature of it. the blade, stuffed with many graynes; it is moderately hot and dry, and of much nourishment, and helpefull for many diseases, aswell within as without the body: the best is hard to breake, heavie, and of gold colour, smooth, and groweth in fat ground.

Leaven of Wheate doth draw, ripen, and open ulcers, and apostumes: Bisket profitteth against rheume.

Barley. Barly is cold and dry in the second degree, and

The nature of it. purgeth. His floure and new milke in plaster cure Biles, and such tumors, by easing their paine, and drawing forth heate. Bread made of it begetteth cold and slimie humours, and nourisheth lesse than wheat. Barley water maketh the skin faire and smooth.

Spelte. Spelte or Zea is of a middle temperature, betweene Wheate and Barly: it is a kinde of Wheate, and commonly goeth under that name.

Rye. Rye is not so hot as Wheate, and hurteth much, except it be well disgested.

Oates. Oates are colder than Wheate, and of operation almost like Barley.

Now follow of Pulse:

Millet. Millet is a most fertile Pulse with sharpe leaves, broad

below

below, and ſharpe towardes the toppe: his cod hath in it a round long fruit. It is cold in the firſt, and dry in the third degree: It ſtoppeth the belly, and nouriſheth but little. The nature of it.

Rize is ſmaller than Millet, and farre leſſe, it groweth in moyſt and watry places: it bindeth. Rize.

Lentells grow like ſmall peaſe, and have a vertue to binde. Lentels.

Peaſe are either of the field or garden; bearing a white, or a purple flower. Peaſe.

Beanes are meanely colde, and moyſt, inflaming; windie, hard to diſgeſt. Beanes.

Now follow Pot-herbes. Pot herbes.

Coleworts haue very broad leaves, which encloſing one another round about become Cabbedges. Theſe be colde and moyſt; and in Egypt be very bitter. The Romanes for the ſpace of ſix hundred yeares uſed this onely herbe to cure all diſeaſes. His broath expelleth the ſtone and gravell, his leaves applyed by themſelves, or with the flowers cure inflamations: his juyce healeth feſtred ſores, it cureth the falling of the haire. Broath made of his leaves with an olde Cocke, cureth the Collicke, and other gripings. Coleworts. Their natures.

Spinagh hath an high ſtalke, and beareth ſharpe ſeedes, his leaves being ſharpe and triangular; it is colde and moyſt in the firſt degree. His juyce expelleth hurtfull rheume: It mollifieth the belly, and cureth hardneſſe of the backe and belly. His Iuyce taketh away the paine and heate of the ſtomacke and liver: it helpeth the byting of Spiders, Spinagh. The nature of it.

Lettiſe hath his leaves gathered into a curled roundneſſe; that which groweth in the field hath a ſhorter Lettiſe.

ſtalke and leafe than Garden Lettiſe, being bitter, and full of milke.

The nature of it. It is moderately moyſt and colde, like Spring water, it is wholſome in Summer, to reſtore appetite to meate. Yet too much of it hurteth the eyes: and boyld with womans milke cureth burnings.

Beetes. Beetes have two colours, the one white, the other blacke and red, both of them for their ſalt diſgeſt and cleanſe, but the white is more ſalt, and bindeth, yet

The nature of it. being boyled, it looſeneth: It cureth obſtructions of the liver, eſpecially if it be taken with vineger and muſtard: It alſo cureth thoſe that be ſicke of the ſplene.

Purſlaine. Purſlaine hath round, thicke, fat, and white leaves on the backe, a red ſtalke, yellow flowers like a Starre: They of the Garden have broad leaves, and a thicke ſtalke: the wilde, leſſer, and more leaves. It is colde in

The nature of it. the firſt, and moyſt in the ſecond degree: it is tart; his juyce helpeth a hot ſtomacke, and hot diſeaſes; it being ſomewhat binding, helpeth fluxes, and evacuations of bloud, if it be uſed with Barly flower.

Mallowes. Garden Mallowes grow with a round leafe, and high ſtalke, his flowers be red, or white: wilde Mallowes

The nature of it. mollifie, and a little diſgeſt: Garden, are moyſt, and weaker. The decoction of Mallowes drunke, cureth on old cough. his leaves ſod and uſed with common oyle heale burning.

Onion. The Onion hath a ſubtile ſtalke, round and hollow, ariſing from a round roote, wound about with many

The nature of it. fouldings: it is hot almoſt in the fourth degree: it is of thicke partes: his juyce is a dry ſubſtance, and hot. An Onion all night layd in cold water and drunke, killeth wormes, and being beaten with ſalt, it draweth away

away warts by the rootes: his juyce put in the eare cureth deafeneſſe.

The Leeke groweth almoſt like Onions, and is of the ſame qualitie, it doth diſſolve ſwellings, and congealed bloud, being applyed like a Plaſter. Leekes. The nature of it.

Parſley hath leaves like Cicuta, it is hot and dry in the third degree, it peirceth and diſſolueth, provoking urine; the ſeede is more effectuall than the herbe. It diſſolveth the ſtone, it conſumeth ill moyſture, and ſores of the head. Parſley. The nature of it.

Theſe hearbes following are uſed for Garlands, or phyſicke; ſome of them ſmelling ſweetly.

The Violet hath leaves leſſer and thinner than Ivie, but more blacke; his ſtalke commeth from the midſt of his roote, beareth a purple flower, and a ſeed full of graynes. It ſpringeth in woods, and ſhadowie places, wilde, but not ſweete: it is cold in the firſt, and moyſt in the ſecond: and cooleth hot diſeaſes and inflammations. Of it there be divers kindes, and colours: as the Pancey or Harts-eaſe. Violet. The nature of it.

The Daiſie hath leaves ſomewhat round above and ſmall below, aud the roote in the ground wheeling about: it is cold in the ſecond degree. Dayſie. The nature of it.

The Ielly-flower hath ſharpe leaves, growing like graſſe with flowers of ſundry colours: it hath an attractive force, and the juyce healeth wounds in the head. Ielly-Flower. The nature of it.

Maioram hath almoſt a woodden ſtalke, with many rough round leaves, and it ſmelleth ſweetly. It is hot and dry in the fourth degree, it is of thin parts, and of a diſgeſting facultie. It healeth, diſgeſteth, and prouoketh vrine. Maioram. The nature of it.

Roſemary. Roſemary is hot and dry in the third degree, and
The nature of it. ſmelleth like Frankincenſe. It mollifieth, diſgeſteth, and dryeth.

Spicknard. Spicknard is hot in the firſt, and dry in the ſecond de-
The nature of it. gree.

Lavender. Lavender heateth and dryeth in the ſecond degree.

Daffodill. White Daffodill is hot and dry. It is of diverſe kindes.

Roſe Campion. Roſe Campion is an hearbe with an Aſh coloured ſtalke, as it were cotton, long leaved, and white, bearing purple flowers, growing up like the Prim-roſe: his ſeede is hot and dry almoſt in the ſecond degree: it prevaileth againſt the ſtinging of Scorpions.

The nature of it.

Herbes uſed in medicine, are Aromatike, or ordinary. Aromaticke doe comfort and ſtrengthen the ſpirits. Thence they take their name.

Saffron. Saffron is hot in the ſecond, and dry in the firſt de-
The nature of it. gree: it a little bindeth, and concocteth; it may with good keeping be preſerved five yeares.

It comforteth the heart and ſtomacke, it maketh pure bloud, and provoketh vrine, it ſcowreth the breſt, it is deadly, if it be taken too much.

Ginger. Ginger waxeth greene twiſe or thriſe in the yeare,
The nature of it. it heateth in the third, and is moyſt in the firſt, it is of more ſubtile parts than Pepper.

Wormeſeede. Zadury or Wormeſeede heateth and dryeth in the
The nature of it. ſecond degree, it is that we doe call the roote of China, like Ginger but not ſo biting.

Gallingall. Gallingall is the roote of a plant growing in Memphis and Syria, it groweth like the flouredeluce, but
The nature of it. with prickes, and is broader and thicker from the roote. It is hot and dry in the third degree, as is the roote of Cyprus.

Calamus

Calamus Aromaticus is an hearbe of India, growing like reeds or figs. It is hot and dry in the second degree, and a little binding. Calamus Aromaticus. The nature of it.

Acorus is a plant growing with leaves like Iris, but smaller, or like segges; the roote is white, sweetly smelling. It is hot and dry in the second degree. Acorus. The nature of it.

There be sexes of hearbes, as of other living things, some of which more helpe, namely, the Male or Female according to their kindes.

Chap. VIII.

Of humane Creatures.

MAn is a creature that hath reason, & as he is most excellent, so hath he a more perfect shape in body than others. His members are formed, and beginne to appeare distinctly about the six and twentieth day. And they are all perfect in Males at thirty dayes, and in Females at 36. dayes. About this time the Childe beginneth to live, and to feele. The Male is moved in the third Month, but the Female in the fourth Month: then it is nourished and increased till the ninth Month; and after the ninth Month, when it is growne great, it is brought forth. This is the forming, and procreating of Man, for whose sake all other creatures were made. What man is, and the manner of his generation.

A feeling soule is a power apprehending and perceiving things placed without the body of living creatures. This facultie is exercised by the sences, and by motion accompanying the sences. The sences are outward or inward. The outward onely perceiving things present: And every one of these have What a feeling soule is. Sences outward.

their

their proper subject : and the most have a middle instrument ; of all which, if there bee a certaine mutuall consent and just proportion : the sences become of more force : but if any one of them have too excellent an object, or his instrument bee corrupt, they are dull and unfit to be used ; This is the cause of blindnesse to those that walke in snow, and of deafenesse unto Smithes, &c. Furthermore, sences are common to the whole body, or proper to some part thereof. The

Touching. sence in the whole body is touching. This is a sence by meanes of flesh, full of sinewes, apprehending tactill qualities.

His instrument is flesh, full of sinewes, or rather a nerve like a hayre dispersed throughout the whole body. In man for the abundance of nerves is this sence most quicke ; his meanes is flesh and skin, for though the skinne be removed, yet a man feeleth hurt. Sences of certaine parts are more or lesse noble. The nobler

Seeing. are Seeing, and Hearing ; whose meanes are the water, and ayre : Sight by the eye perceiveth bright and coloured things : The subject thereof is light, &c. Greene a most temperate colour is most acceptable to the sight. His instrument is the nerve Opticke, which from the braine commeth to the eyes.

Hearing. Hearing is a sence perceiving soundes ; his instrument is a little skin in the lowest winding, or turning of the eare, dry and full of holes: the skin is double, one below, which covereth a little bone like an Anvile: another above, containing a little bone, as it were a small Mallet. The upper striken by the soundes, striketh the lower, and stirreth up the spirits in the nerves to perceive the sound.

The

The more un-noble ſences are Taſting, and Smelling: Taſting apprehendeth taſtes. His inſtrument is a nerve ſtretched like a Net upon the fleſh of the tong, which is full of little pores. His meanes is a temperate ſalt humour, which if it doe exceed the juſt quantitie, it doth not exactly perceive taſtes: but if it be altogether conſumed, no taſtes are perceived. Taſting.

Smelling judgeth qualities fit for ſmell: his inſtrument is the entrance into the firſt ventricle covered with a ſmall skin; the dryer it is the quicker of ſmell, as in Dogs and Vultures: but man for the moyſtneſſe of his braine, hath but a dull ſmell. Smelling.

Now follow the inward ſences, which beſide things preſently offered, doe know formes of many abſent things. By theſe the creature doth not onely perceive, but alſo underſtandeth that which hee doth perceive. Theſe have their ſeate in the braine: They are either conceiving or preſerving: Conceiving exerciſeth his facultie by diſcerning, or more fully judging: it is called, Common ſence, and the other is Phantaſie. Common ſence more fully diſtinguiſheth ſenſible things; his inſtrument is the former ventricle of the braine, made by dryneſſe fit to receive. Phantaſie is an inward ſence more diligently examining the forms of things: This is the thought and judgement of creatures, his place is the middle part of the braine, being through dryneſſe apt to retaine. Sences inward. Conceiving.

The preſerving ſence is Memory, which according to the conſtitution of the braine is better or worſe. It is weaker in a moyſt braine than in the dry braine. His inſtrument is the hinder part of the braine. Preſerving.

Memorie calling backe images preſerved in former

time, is called Remembrance: but this is not without the use of reason, and therefore is onely attributed to man.

The wittie excell in remembrance, the dull in memorie.

Sleepe how caused. Sleepe is the resting of the feeling facultie: his cause is a cooling of the brayne by a pleasant abounding vapour, breathing forth of the stomacke, and ascending to the braine. When that vapour is concoct, and turned into spirits, the heate returneth, and the sences recovering their former function, cause waking. There be certaine appointed courses for watch and sleepe, lest creatures languish with overmuch motion.

Waking how caused.

Dreames. Affections of sleepe are Dreames, Night-mare, and Extasie, &c.

What they be. A dreame is an inward act of the minde, the bodie sleeping: and the quieter that sleepe is, the easier bee dreames: but if sleepe bee unquiet, then the minde is troubled.

Their variety. Varietie of dreames is according to the divers constitution of the body.

The cleare and pleasant dreames are when the spirits of the braine, which the soule useth to imagine with, are most pure and thin, as towardes morning when concoction is perfected.

But troublesome dreames are when the spirits bee thicke and unpure. All naturall dreames are by images, either before proffered to memorie, or conceived by temperature alone, or by some influence from the starres, as some thinke.

From dreames many things may be collected, touching the constitution of the body.

The

The Night-mare, is a ſeeming of being choked or ſtrangled by one leaping upon him: feare following this compreſſion, the voyce is taken away. This affection commeth when the vitall ſpirits in the braine are darkened by vapours, aſcending from melancholy and phlegme, inſomuch, that that facultie being oppreſſed, ſome heavie thing ſeemeth to bee layd upon us. The night-mare. How occaſioned.

Therefore this diſeaſe is familiar to thoſe, who through age or ſexe are much inclined unto theſe humours.

An Extaſie or traunce, is a vehement imagination of the departure (for a time) of the ſoule from the bodie. A deepe ſleepe laſting ſome dayes enſeweth, for the ſoule giving over it ſelfe to cogitation, ceaſeth to ſerve the body. Wherefore men wanting motion and ſence ſeeme to be dead. And with what humours the braine ſhall be compaſſed, ſuch phanſies doth it conceive, although ſometime ſpirits working on ſuch phataſies, imprint other things. A trance. What it is.

Now followeth Motion, which accompanieth ſence, and is cauſed either by appetite, or change of place; for we deſiring things perceived in ſence, cannot attaine unto them withour moving our body to that thing.

Appetite is a facultie deſiring ſuch things as are objects to our ſenſe. It chiefly followeth touching, or thinking. Delight followeth touching. Delight is a deſire of an agreeing Object. Griefe is his contrary, which is a turning from the hurtfull object, or from that we count unpleaſant. Appetites following cogitation, are all the motions of the heart, which be called Appetite. What it is.

affections, and are either good or bad. The good cherish and preserve the nature of our sensitive faculties, as mirth, love, hope, which come of heate: when the heart dilating it selfe, desireth to enjoy the thing, with which it is delighted.

Motion what it is.

Motion is a facultie of living creatures, stirring a bodie, entised by appetite from one place to another. It is either of the whole body, or of partes: Of the whole body, as by going, &c. Of partes, as breathing, which is made either by enlarging of the parts, which serve for the taking in of the ayre, or by the closing of them for the expelling of corrupt ayre.

Of the bodies of living creatures.

Now followeth to intreat, Of the bodies of living creatures.

What the matter of the body is.

The matter of the body in which the foresaid faculties be, is the seede of both sexes. Seede is most pure bloud, perfectly concocted in the testicles, and it is gathered from the whole bodie. For the testicles lacking nourishment, draw bloud from the hollow veyne and change it.

Conception, what it is.

Conception is the action of the wombe, by which the power is stirred up to execute his inbred gift. Then that power being stirred up doth diversly distract the matter, separating his divers partes: and thus all parts alike get together their shape. Likewise all of them together are adorned with the faculties of the vegetative, or sensitive soule. Amongst the naturall faculties of the partes of the body, if there be putrifaction, a fault of the concocting facultie, there is made a certaine generation of matter: This is naturall, or extraordinary.

Naturall.

Naturall is by an inbred heate, not altogether subdued,

dued, but ſlackly exerciſing force, through diſpoſition of the mattter. Such is to be ſeene in inflamations, botches, and impoſtumes. For in theſe, nature ſo farre as it can, laboureth to bring this his ſubject matter to the beſt forme. Therefore ſuch ſuppuration is wont to argue a certaine ſtrength of nature, wherefore often with convenient helpes, it is carefully encreaſed. In this kinde, eſpecially is prayſed white, thicke, ſmooth, equall, and leaſt ſmelling matter.

Extraordinary mattering is, when nature altogether ſubdued, the humors or parts themſelves are made full of corrupt matter through ſtore of rottenneſſe. Extraordinary.

But nature, or the concocting facultie, is overcome either through proper weakneſſe, or by corrupt matter: this is obſerved in all rotten, malignant, and ſtinking botches, in which according to the diverſe faſhioning of abounding matter, are found diverſe ſorts of ſolid bodyes, as haires, and ſuch other like.

Of partes of the body which appertaine to the making up of the whole body, ſome are containing, and ſome contained. The contained for their fluent nature are ſuſtained by helpe of others: Such are humours and ſpirits. Humors are moyſt partes begot of the firſt mixture of nouriſhment in the liver. Theſe are in the ſeede of creatures, and are called the beginning of things endued with bloud. Any of theſe if they fayle of their proper nature, are not fit to be in the bodie, but are become unnaturall. Of the parts of the body.

Humours are of the firſt, & the ſecond ſort. The firſt are hot or colde, and moyſt, and dry: Bloud is hot and moyſt, and it is a thin, red, humour, and ſweete. With this the other partes be chiefly nouriſhed, amongſt Humors. Blood.

whom this is the chiefe. The faults of this is in substance, as putrifaction, or mixture of vicious humors: or in qualitie, as too thicke or too thin; or is affected with some other badnesse. The humour that is hot and dry, is choller; this is a thinne, yellow, pale, and bitter humour. His use is to helpe the expelling faculties, and chiefly in the Guts. Gall besides nature, through aduſtion is yellow, like an egges yolke, in the stomacke it is like rustie brasse.

Phlegme. The colde and moyst is phlegme, which is a tough, slimie, and whitish humour, and tastlesse. If this have a fuller concoction, it is turned into bloud. His use is to moysten the joynts. When it declineth from his proper nature, it is salt or tart, according to his mixture. The colde and dry humour is blacke choller. This is a thicke, blackish, tart, bitter humour. It serveth to strengthen the stomacke, that it may more easily retaine, and receive meate. When it declineth from his proper nature by immoderate burning, it hath divers kindes. Humors of the second sort are begotten of the first, being wrought with concoction they are like dew or glew. Dew is a humor contained in the hollownesse of the members, and joyned to their substance, like dew, with which they are nourished.

Glew. Glew is a humour immoderately congealed, and being firmely fastned to the members, beginneth to bee changed unto their substance, of which change it is called *Cambium*, and *carniformis*, like the flesh.

Spirits. Now follow the spirits, which are a fluent part of the body, most thin, and begotten of the bloud of the heart. The spirits are the chiefe instrument, and as it were the Chariot of the soules faculties, for with most

speedie,

ſpeedie, and ſwift motion, it carrieth them over all the body.

Spirits having roote in the heart, be either abſolute or rude, and to be finiſhed in other parts. Vitall ſpirits be abſolute in the heart, and are of a firie nature, and from the heart by arteries are ſpred in the bodie, by whoſe communication all parts doe live. Vitall. What they are.

Spirits to be perfected in other parts bee Animall, which from the heart be carried into the braine, and there made ſubtile by nerves, flowing unto all the other parts; and this is the Chariot of functions or faculties of all living Creatures. Animall. What they are.

Parts containing are more ſolid, which are ſuſtained by themſelves; all theſe either are as a ſtay or covering. The ſtay to other parts, is either bone, or griſtle. Bone is the hardeſt and dryeſt part, and ſtay to all the bodie. Bones are knit together by ligaments, which are like hard and thicke threeds, being as bandes to the bones of the bodie.

Griſtles are ſomewhat ſofter than the bones, and ſuſtaine all other partes. The covering of the other parts, is the skin, which is tender without bloud, and covereth the whole body. The membrane is a tender skin, covering ſome parts. Griſtles. What they are.

There is yet in theſe parts a common excrement of concoction, which is ſweat, and is a moyſtneſſe of the veynes, expelled by ſecret pores, of this is to be ſeene a diverſe colour, according to the die of the moyſtneſſe, or matter thereof: the uſuall is watriſh, through the white ſubſtance of the channels, through which it runneth. But if the pores be large and open, that without delay, and long change it may ſlide through them: Sweat. What it is.

them: eſpecially, if for ſome affection of minde or diſeaſe, it become thinner, then is it ſpeedily expelled, and tainted with ſome other colour, &c. Therefore from the colour of ſweate, the bodyes conſtitution may be knowne. Colde ſweate is worſe to bee liked than hot, but either is bad if they be unequall.

Alſo the containing parts afore-named are animall, or vitall, and each of theſe are more, or leſſe principall. Animall parts are, in which the animall parts are moſt exerciſed, as ſence and motion together, or alone. The chiefe member of motion and ſence, is the braine contained in the head; whoſe ſubſtance being hurt, it is in danger to loſe both ſence and motion.

Braine, what it is. The Braine is ſofter than the other parts, white, and covered with a double skinne cloſely. The skinne of the brayne is either called *Pia*, or *Dura mater*. The ſcalpe is a thicke bone, covering the whole head, and hath upon it a skin with hayres. The ſcalpe is diſtinguiſhed with certaine ſeames in certaine parts, which are true or fayned, &c.

Excrements of the braine. The excrements of the braine are either thicke or thin: The thin are teares burſting from the braine by the angles of the eyes. The greater the fleſh of thoſe angles be, ſo much more plentifull be teares, chiefly if the complexion bee colde and moyſt, as of women. Teares be cauſed by heate which openeth, or colde which preſſeth the fleſh, and cauſeth teares.

The thicker excrements which are expelled from the brayne, eyther are by the eares or noſe.

Of the eares. In the eares is a moyſt excrement of the brayne, gathering and rotting in their hollowneſſe.

Of the noſe. That of the noſe is a thicker excrement than that of the

the braine: which although it be like flegme, yet it is altogether of another nature. The pithe of the backe bone is neare to the nature of the braines excrement, ſave that it is harder and ſomething hotter. The backe is bonie, round, and in his length hath twentie foure joynts. The Nerves are leſſe principall parts of ſence and motion, which if they be out of order, the parts in which theſe be, become unfit to move. Nerves or ſinewes are thin parts, round, &c. white, much like to thicke threeds. Some are ſofter, ſome harder. The ſofter are of more uſe, of which are ſix paire, by two and two, from the braine arriving to other parts.

Firſt, to the eyes. Secondly, To moove the eyes. Thirdly, to the tongue and taſte. Fourthly, to the pallet and skin of the mouth. Fiftly, to the hearing. The ſixt, to the mouth of the ſtomacke, by which ſence and motion deſcend.

Hard Nerves have a duller faculcie, and leſſe ſerving to the ſenſes, of which are thirtie paire, which by couples come from the marrow of the backe bone: by whoſe conduct the backe eaſily executeth his faculties.

Of the parts to breath.

The principall parts of breathing are in the breſt: being either Lightes or Heart; wherefore theſe being touched, breathing is immediately hurt; and ſuch wounds be deadly. The Longes are a ſpongious and thin part, ſoft, and like foame of congealed bloud, declining ſomething to the right ſide. Breath is brought unto the Lightes by a rough Artery, knit to the roote of the tongue. This Arterie is a long channell made of many griſtle rings on a row, which endeth in the

The breathing parts.

Lights. If any thing fall into the hollownesse of this, the breath is hindred, and there is danger to be choaked.

The heart, what it is. The Heart is a fleshie part, solid, and well compacted, almost like a Pyramis: it hath two ventricles, the right and the left. The right by an arteriall veine communicateth bloud to the Lights. This veine is so called of a proper substance and office. From the left ventricle of the Heart ariseth Aorta the roote of all the Arteries. These are hollow vessells in the Heart begotte: and are thicke, distributing spirits throughout the whole bodie.

Spittle, what it is. The excrements of the principall parts of breathing be spittle and cough. Spittle is a windie foame cast out of the brest, and his parts: If it be avoyded with noyse, it is called coughing. Superfluitie of this matter is judged by the colour, for red spittle is of bloud, yellow of choler: white of flegme, and blacke of melancholy.

Midriffe, what it is. The lesse principall parts of breathing, are the midriffe, and the mediastin. The midriffe is a thinne skin, like perchment, fastened overthwart to the sides, and includeth the parts of the brest, The mediastin is a double skinne in length, dividing the brest into two sides.

The vitall parts are those which serve to the preservation of the spirits of living creatures, and are appoynted to nourishment, or generation. The principall parts for the perfection of nourishment be the stomacke and the Liver.

Stomacke, what it is. The Stomacke is a part like perchment, sticking to the throat, round, but long, and as it were, twisted with

with many ſmall threeds, and it is the kitchin of nouriſhment to be concocted.

The throat is a channell, full of nerves, carrying meate from the mouth to the ſtomacke. The Fibres are as it were, very ſmall threeds, by benefit whereof the ſtomacke enjoyeth her facultie. Theſe if they bee ſtraight and right, draw nouriſhment unto them: if crooked, they are oblique or tranſverſe: thoſe retaine nouriſhment received; theſe expell excrements. Throat, w it is,

The caſting forth of excrements by the upper parts of the ſtomacke, is called vomit, which expelleth that which aboundeth in the ſtomacke: yet ſuch excrement is many times ſent backe from other parts into the ſtomacke. Vomiting.

The Liver lyeth upon the ſtomacke on the right ſide, encloſing it with his laps, and is a fleſhy part of nouriſhment, red, like congealed bloud, placed next unto the Midriffe. In the Liver is made the ſecond concoction, namely, of nouriſhment in the belly, turned into a red maſſe: from the Liver ariſeth a hollow veine, the roote of all other veynes. Theſe are hollow parts, round, and guide the bloud unto all the body; the ſubſtance of theſe is thinner by ſixe folde than the skin of the Arteries, whoſe ſubſtance ought to be thicker for the vehement motion of the ſpirits. That the office of the Liver may be made perfect by meanes of veynes, other particles are allotted thereunto: which receive the abounding humors, choller, &c. The Gall receiveth yellow choller, and the Milt blacke. The bladder of the Gall is a ſlimie part in the hollow part of the Liver, of the figure of a Peare: the Milt is a long part like a ſhooe-ſole, on the left ſide over againſt the Liver, but ſomewhat lower. Water from the Liver is The Liver.

received by the reines and bladder. The ſubſtance of the reines is thicke, and ſolid fleſh; they ſticke on both ſides about the loynes, and have emulgent veynes ariſing from the hollow veine. From the trench of the veynes hang downeward white, narrow veynes, guiding water from the reines unto the bladder. The bladder is a ſlimie part, round, and containing urine in it.

Vrine. Vrine is a whey ſeparated from bloud in the reines, and more fully purged in the bladder. This in the bodie of a temperate man, and ſound, is of a meane ſubſtance, and in quantitie anſwereth the drinke received: in the chollerike it is yellow, or red. His ſediment is white, ſmooth, and equall without bubbles, &c.

How to diſcerne a ſound body by it. A ſound body is knowne by voyding vrine, which in the morning is white, and after ſomething red. For the one ſignifieth that it doth, and the other that it hath concocted. Vrine is of a meane ſubſtance betwixt thin and thicke. Thin vrine argueth the weakeneſſe of the body, and coldneſſe predominant, and rawneſſe of the parts of concoction. And this either remaineth the ſame or becommeth troubled. That ſheweth concoction is not yet begunne, and therefore raw, or This, that it is but new begunne. Thicke vrine like that of beaſts, noteth exceſſe of matter or concoction. Vrine doth varie according to age or complexion, or according to dyet and affections of the minde. For the vrine of Infants for the moſt part is white and milkie, the vrine of boyes is thicker, and not ſo white, the vrine of young men is like golde, and of olde men white and thin.

Complexions, Touching complexions, the chollerick have Orange colour:

colour: Phlegmatike pale, and thicke: the Sanguine, red and meane. The melancholike, wan and thin.

Dyet changeth vrine, as Saffron or Cassia causeth Orange colour. Vrine of those that fast long is yellow, of those that eate too much, it is white. Dyet.

The lesse principall parts of concoction, are the gutts and mesenterion. The gutts are long, round, hollow, and are knit to the lower part of the stomacke. These are thicke or thin. The thinner are the three uppermost, as *Duodenum*, *Iejunum*, and *Ileos*. Guts.

Duodenum is the uppermost gut, twelue fingers long. The *Iejunum* beginneth where the *Duodenum* beginneth to turne unto rundells. *Ileos* is a thin gut, having inwrapped windings. The thicker guts of a thicker skin, are *Cæcum*, *Colon*, and *Rectum*. Their severall kinds.

The blinde gut is thicke, large, and short, having but one mouth. The *Colon* hath many turnings. The right goeth straight to the *Tuell*: The excrement of the belly, if it be but softly compact, and made at the appointed time, and somewhat yellow, and not much smelling, argueth good concoction. If it be red, it argueth, that much colour floweth in the stomacke: if it be white, it sheweth cruditie and want of choller.

Blew sheweth mortification, and cold of the inward parts. Too thicke or thin egestion, argueth bad concoction: if fattish, or slimie, it noteth a consumption. Above all, in these things it must bee observed, what meate hath lately beene received.

The guts are wrapped about with the Mesenterion, which is a skin in the end full of kernells, and woven with many thin veines, which meeting together, make a multiplying of *Vena porta* in the hollow of the Liver. How placed in the body.

Thus of the common parts of all creatures: their kindes follow.

The distinction of living creatures, and their severall kinds.

All Creatures are reasonable, or unreasonable. They which want reason, are Beasts, who live on Land or in Water. Those which live on the earth, moove on the earth, or in the ayre. Beasts moving on the earth, are fourefooted, or creeping. Fourefooted Beasts, bring forth young shaped as themselves, or eggs. Those that bring forth living Creatures, some have solide feete, and some cloven feete. They have solide feete who want hornes, as Horses, Mules, and Asses &c. The cloven footed Beastes, for the most part have hornes, as the Oxe, Goate, Hart, &c.

Land Beasts bringing forth eggs, are the Crocodiles, and some which have a shell.

Frogges, Liserts, and some Serpents have foure feete.

Creatures creeping on the earth, are all kinde of Wormes, Ants, Earwigs: to whom may bee added, Spiders, Lice, Gnatts, and such other.

Fowles are hotter and dryer than Creatures living onely on the land, and all of them bring forth egges, and have but two feete. They have either whole feete or clawes. Geese, Duckes, Swannes, have whole feete to rowe in the water.

Other Birds for the most part have clawes, as Doves, Swallowes, Hennes, Sparrowes, &c.

The insect of Fowles, are Waspes, Bees, Hornetts, Gnatts, Flies. These Creatures are they which live upon the earth: those that live in the water, are Fishes, or of that kinde, as the Sea-Horse, the Sea-Dog, &c.

Fishes many of them are like to Creatures living on the

the earth in their parts: but they have not ſo much bloud: therefore they are colder and moyſter.

Fiſhes are ſoft, or hard: the ſoft have ſcales, or onely a skin.

Of the ſcalie be the Carpe, the Pearch. Of the ſlimie be Eeles.

The harder fiſhes have plates, as the Crabbe, the Lobſter, &c. Or ſhells, as Oyſters, Muſſells, &c.

FINIS.

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